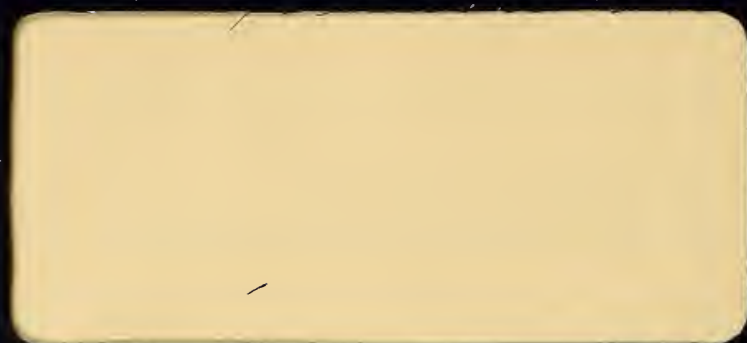


MEDICARE MENTAL HEALTH DEMONSTRATION
FINAL EVALUATION REPORT

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MEDICARE MENTAL HEALTH DEMONSTRATION
FINAL EVALUATION REPORT

Submitted to:

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The views and opinions expressed in this report are those of the authors, not necessarily those of the Office of the Secretary of the U.S. Department of Health and Human Services or the Health Care Financing Administration

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THE HISTORY OF THE

REIGN OF

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BY

JOHN BURNET

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I. BACKGROUND ON THE MEDICARE MENTAL
HEALTH DEMONSTRATION

I. BACKGROUND ON THE MEDICARE MENTAL HEALTH DEMONSTRATION

This chapter presents an overview of the factors leading to the Medicare Mental Health Demonstration (MMHD) and includes a discussion of: (1) the ambulatory mental health environment; (2) existing Medicare coverage of ambulatory mental health treatment; and, (3) the Medicare Mental Health Demonstration.

1. THE AMBULATORY MENTAL HEALTH ENVIRONMENT

The national commitment to provide mental health care and treatment in the community has evolved over some 40 years. The movement began with the recognition that persons receiving prompt, continuous treatment within their local communities are more likely to recover quickly and return to "normal" functioning than those who are placed in State mental hospitals or other inpatient settings for indefinite periods of time. The trends have been toward deinstitutionalization, utilization of general hospitals when short-term inpatient care is necessary, and maintenance of patients in their own communities through the provision of more ambulatory care services. Additionally, comprehensive outpatient psychiatric partial hospitalization programs have also been developed. These programs are generally viewed as desirable alternatives to institutionalization for individuals in need of multiple services but not necessarily 24-hour care.

The Congress enacted the Community Mental Health Centers Act of 1963 (P.L. 88-164), authorizing Federal grants to support construction of community mental health centers. This landmark legislation was followed closely by legislation designed to extend and expand the provisions of the Act. This commitment was further extended and expanded by the 94th Congress with the enactment of Public Law 94-63, which affirmed the public commitment and embraced a redefinition of CMHCs, as delineated in Section 201. The previously mandated service

package that included five essential services (inpatient service, outpatient service, partial hospitalization, emergency service, and consultation and education) was expanded to include:

- . Programs of specialized services for the mental health of children and the elderly, including a full range of diagnostic, treatment, liaison, and follow-up services
- . Assistance to courts and other public agencies in screening residents of the catchment area being considered for referral to a State mental health facility for inpatient treatment
- . Follow-up care for resident of the catchment area who have been discharged from a mental health facility
- . A program of transitional, halfway house services for mentally ill individuals who are catchment area residents and who have been discharged from a mental health facility or would require inpatient care in such a facility without such services
- . Specialized programs for the prevention, treatment, and rehabilitation of both alcohol and drug abusing individuals, unless the Department of Health and Human Services (HHS) determines that there is insufficient need for such services in the area or the need is being met through other programs

In addition to mandating specific services, Section 201(b)(2) delineated additional "service requirements" that stated that CMHC services:

- . Must be coordinated with services provided by other health and social service agencies (including State mental health facilities) in the catchment area, or by such agencies serving residents of the center's catchment area, to ensure that center clients have access to needed health and social services
- . May be provided through the center or satellite centers or clinics, through the staff of the center, or through appropriate arrangements with health professionals and others in the catchment area
- . Must be available and accessible to residents, as appropriate, and in a manner preserving human dignity; assuring continuity and high-quality care; and overcoming geographic, cultural, linguistic, and economic barriers to receipt of services
- . Must be available, when medically necessary, at all times (24 hours per day, seven days per week)

Section 201 also addressed areas related to the administration and ongoing management of CMHCs, including:

- . Governance--The center's governing body is to be composed of catchment area residents who, as a group, are representative of the residents of the area. It must meet at least monthly and assume responsibility for establishing general center policies, approving the center's annual budget, and approving selection of the center's director.
- . Quality Assurance--The center must establish an ongoing program, including utilization and peer review systems.
- . Integrated Medical Records System--The center must establish such a system to provide access to all past and present information on the health status of each client (including a drug use profile), while maintaining safeguards to preserve confidentiality and protect client rights (in accordance with applicable Federal and State laws).
- . Professional Advisory Board--The center must establish such a board, to be composed of members of the professional staff of the center, to advise the center's governing board on policy regarding medical and other services provided by such staff.
- . Identifiable Administrative Unit For Consultation And Education--The requirement for an identifiable administrative unit responsible for consultation and education services is not further articulated, except for the possibility of waiver of the requirements under certain conditions.

Other sections of the law dealt with additional requirements for management and administration, including requirements under Section 206 that the center had made (or would make or will continue to make) every reasonable effort to secure reimbursement for services provided to persons eligible for various Federal and State programs (Medicare, among others) and that the center had developed a fee schedule for services to cover its reasonable costs and had developed a corresponding schedule of discounts (sliding fee scale), based on client ability to pay, to be applied to the fee schedule. Also, the center had made (and will continue to make) every reasonable effort to:

- . Collect reimbursement in terms of its fee schedule (and sliding fee scale)
- . Collect reimbursement from other payors (as specified) on the basis of the full amount of fee for service, without the application of the sliding fee scale

Later, the Community Mental Health Extension Act of 1978 (Public Law 95-622) extended the CMHC program with some technical revisions. With enactment of the Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35), direct (categorical) funding of centers by the Federal government was terminated. In its place, an Alcohol and Drug Abuse and Mental Health Services Block Grant was established, to be administered by the States with considerable discretion, although some continued funding of centers was mandated under the Act. At the time of termination of the categorical mental health centers program, approximately 800 centers had received support from the National Institute of Mental Health (NIMH), having been mandated to meet the above requirements, and approximately \$2 billion was expended by NIMH to support the centers.^{1/}

In addition to the community mental health centers, there are approximately 1,300 freestanding ambulatory mental health centers (AMHCs) and partial hospitalization programs (PHPs). In general, these programs are considered to be less comprehensive--providing less variety of services, that is--than the CMHCs, although there are many notable exceptions to this generality. By and large, these two latter categories of programs have been developed and supported through State and local funds with service delivery and administrative mandates established by these funding sources.

The CMHCs and freestanding clinics and partial hospitalization programs operate under a variety of organizational auspices:

- . Hospital-operated
- . Hospital-affiliated

^{1/} National Institute of Mental Health. 1979 Directory of Federally Funded Community Mental Health Centers, 2.

- . Freestanding, not-for-profit corporation
- . Freestanding, for-profit corporation
- . State government-operated
- . Local government-operated
- . Quasi-government agency-operated; e.g., the agency is freestanding but staff are government employees

These organizational auspices can and do affect the staffing, funding, service delivery, or clientele, and services of ambulatory mental health programs. For example, the ambulatory mental health programs operating under a unit of government are often constrained in the kinds of clinical staff they are able to attract due to limitations imposed by civil services, such as salary levels.

Another important factor affecting the staffing, clientele, and services of ambulatory mental health programs is licensure. Most States and/or localities require ambulatory mental health programs to meet a set of facility standards in order to be allowed to operate. Depending upon the specific political jurisdiction, the standards may pertain only to the physical plant requirements, e.g., size of corridors, number of exits, fire alarm systems, etc., the facility must meet, or the programmatic requirements to be met, including the services provided, days and hours of operation, clients to be served, and the qualifications of program staff delivering services. The stringency of the programmatic standards bears a direct relationship to program characteristics, and there is little consistency in the stringency of the standards across jurisdictions.

In a 1979 study^{2/} of the unit and episode costs of mental health treatment, it was found that a fairly consistent array of types of outpatient mental health services was provided among CMHCs and freestanding clinics, including:

- . Intake Interview--Includes psychosocial evaluation, substance abuse evaluation, pre-admission work-up, pre-intake orientation, and preliminary services
- . Psychological Evaluation--Includes psychosocial evaluation, client evaluation, diagnostic assessment, and psychological testing

^{2/} Morrison, L. J. Unit and Episode Costs of Mental Health Treatment, Macro Systems, Inc., 1979.

- . Individual Therapy--Includes family or couples therapy, marriage counseling, and relatives counseling, depending upon whether or not a program charged clients or third-party payors for them as individual or group therapy
- . Family Therapy--Includes couples therapy, marriage counseling, and relatives counseling
- . Group Therapy--Includes family or couples therapy, marriage counseling, and relatives counseling, depending upon whether or not a program charged clients or third-party payors for them as individual or group therapy
- . Medication Review--Includes chemotherapy or the actual provision of medication

Although the array of services was found to be relatively consistent, considerable variation was found in what each service constitutes across programs. Extensive variation as well was found regarding which staff (and their qualifications) provide each service. For example, individual therapy was provided by either a Ph.D. psychologist, a master's level psychologist, a master's level counselor, a registered nurse (B.A. or less), a master's level social worker, a bachelor's level social worker, other bachelor's level staff, or high school graduates, depending on the site.

Similar variability was found regarding what constitutes partial hospitalization. This service ranged from a socialization program consisting of arts and crafts activities for clients who drop in periodically to a highly structured program for chronically mentally ill individuals to teach skills of daily living. Staffing patterns varied according to the type of service provided, with the more structured programs having better educated staff.

In examining utilization of services (in order to determine treatment episode costs), it was found that the average outpatient was seen seven times and that the average partial hospitalization stay (based on a five-day treatment week) was 53 days.^{3/} These data are consistent with other findings in the field. For example, NIMH has reported^{4/} that the average number of outpatient

^{3/} Ibid. 1-17.

^{4/} National Institute of Mental Health. The Financing, Utilization, and Quality of Mental Health Care in the United States, 1976, 11.

visits per episode is 5.3 in community mental health centers and five to eight in other outpatient settings. These data are substantially less than those reported for private psychiatric practices, 28 visits.^{5/}

Data do not exist that characterize the freestanding partial hospitalization programs primarily because few programs are identifiable as such. Partial hospitalization, or day treatment as it is sometimes called, began to develop some 20 years ago. During that time, two different models of care have emerged:

- . Inpatient care reducing to partial hospitalization
- . Outpatient care increasing to partial hospitalization

The former model might be thought of in a general hospital setting. In this case, a large-enough patient load may have grown into a separate program for day treatment, but without all of the services provided on an inpatient basis. The latter model is structured around the concept of psychosocial rehabilitation. Most partial hospitalization programs included in the MMHD are psychosocial rehabilitation centers for adults who have received inpatient psychiatric care and treatment, but for whom, hospitalization is considered either unnecessary or inappropriate in a treatment sense. The primary objective of many of the centers is to help clients cope with the normal demands of life and reintroduce them back into the community.

Regardless of the path taken by various organizations in the provision of partial hospitalization services, several points serve to characterize them organizationally. First, they tend to have a very local focus. Most of the programs participating in the MMHD are confined (either by choice or by regulation) to serving the population of a single county. State, county, and philanthropic grants or contracts often provide all the revenues to a facility. Very few of the programs receive reimbursement from any third-party payor (including Medicare).

The service objectives of many of the partial hospitalization programs can be thought of in two different ways:

^{5/} Steven Sharfstein. Cited at the National Conference on Self-Sufficiency of Community Mental Health Centers, Louisville, Kentucky, September 8-9, 1977.

- . To help prevent the necessity for hospitalization or other reinstitutionalization of former mental patients
- . To help improve the level of personal, social, and vocational adjustment in the community

These objectives are defined through a wide variety of therapeutic services as well as social, vocational, and transitional living programs.

In general, the CMHCs and AMHCs have been found to be large organizations, providing a wide range of treatment services in a variety of ways. Services, although relatively short in duration, were not defined in a consistent way across programs, nor were there universally recognized standards for the services and the programs and staff who provide them. These observations, in concert with the issues to be presented in the next major section, had direct implications for the Medicare Mental Health Demonstration.

2. MENTAL HEALTH AND MEDICARE

There is not much known regarding the participation of organized ambulatory mental health settings in Medicare, but what is known is that such participation is limited statutorily. Why there are statutory limitations is embodied in perceptions of what ambulatory mental health treatment is and how it is delivered in organized settings. A principal perception held when the original Medicare legislation was enacted was that mental illness is a persistent malady for which there is not a curative technology in the same sense as the majority of medical practice. Medicare was conceived to address the medical care needs of the elderly (and, later, the disabled) through the application of medical technology. It was felt that a medical condition like mental illness lacked precise diagnostics and established treatment protocols that could be expected to lead to defined outcomes within a specified period of time and, therefore, must be limited in some way in terms of covered benefits to avoid the Federal government's payment in perpetuity for the unknown.

Given this philosophy, it is not surprising that only about two percent of Medicare reimbursements are for mental conditions. For example, during FY 1981, of the approximately \$41 billion in interim reimbursements, \$995 million were for mental conditions, as follows:^{6/}

| | |
|---------------------------------|---------------|
| Psychiatric hospitals | \$190,000,000 |
| Short-stay hospitals | 630,000,000 |
| Psychiatrists and psychologists | 115,000,000 |
| Hospital outpatient | 45,000,000 |
| Other institutions (SNFs, HHAs) | 15,000,000 |
| TOTAL | \$995,000,000 |

It is not known what portion of the above amounts is incurred by ambulatory mental health providers (not hospital operated) for what procedures, or for what services incident to those of a physician.

According to Medicare regulations, CMHCs, organized ambulatory mental health clinics, and partial hospitalization programs are not eligible for cost-related facility reimbursement as a "provider" unless they are directly operated by a hospital. A 1975 study of the National Council of Community Mental Health Centers reported (on the basis of 178 member centers responding to a survey):^{7/}

| | <u>With Part B Status</u> | <u>Without Part B Status</u> | <u>Total</u> |
|---------------------|-------------------------------|----------------------------------|-----------------|
| Hospital-Affiliated | 64 (58%) | 47 (42%) | 111 (62%) |
| Hospital-Operated | 20 (83%) | 4 (17%) | 24 (13%) |
| Freestanding | <u>18 (42%)</u> | <u>25 (58%)</u> | <u>43 (24%)</u> |
| Total | 102 (57%) | 76 (43%) | 178 (100%) |

^{6/} Data are based on a 1984 private communication between Macro Systems, Inc., and staff of the HCFA/Statistical Information Services Branch.

^{7/} National Council of Community Mental Health Centers. "Survey of NCCMHC Members Regarding CMHC Participation under Medicare and Medicaid Programs," December, 1975.

THE [illegible] OF [illegible]

BY [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Clearly, the majority of freestanding centers were unable to meet provider participation criteria as independent entities. Actual participation, however, is not known. For example, the number of centers responding that deem "provider" status as billing through a physician versus billing on behalf of a center is not known. Yet some centers are, indeed, able to bill Medicare Part B directly and receive reimbursement as "physician-directed clinics," even though there is no specific provision for this under the Social Security Act, whereas others are billing through physician. The different Part B carriers also approach the possible participation of centers in Part B in varying ways. Also interesting to note is the "hospital-affiliated" classification, which applies to centers that have specific, written agreements with hospitals--in many instances, strictly as pass-through arrangements for third-party payments, i.e., the hospital bills its Part A intermediary for services provided (by the center) and the hospital reimburses the center, in turn, (usually for a fee) when payment is received. These findings attest to the complexity ambulatory mental health centers face in attempting to participate in Medicare.

Partial hospitalization services provided by non-hospital operated programs also suffer from a lack of coverage by Medicare. Although some of their services may be covered as outpatient services, other important aspects are not covered, such as food. In contrast, programs operated or affiliated with a hospital often receive full coverage under Medicare Part A although the patient technically is not a "full-time" inpatient.

These nonhospital-affiliated settings can received reimbursement only on a fee-for-service basis for physician's services. Moreover, regardless of the actual cost for physician's services incurred in connection with the "treatment of a mental, psychoneurotic, or personality disorder..." for an individual who is "not an inpatient of a hospital"^{8/} at the time the services are rendered, the amount of such expenses that can be covered in a calendar year is limited to the lesser of \$312.50 or 62.5 percent of the charges."^{9/} Because \$312.50

^{8/} Commerce Clearinghouse. Medicare and Medicaid Guide, 1321.

^{9/} It should be noted that the Medicare Carriers Manual uses the term "reasonable charges" relative to the 62.5 percent limitation, whereas the law (P.L. 89-87) uses the term "expenses."

represents 62.5 percent of \$500, any amount of non-inpatient mental health service expenses incurred after this reasonable charge "limit" of \$500 has been reached would not be covered and, therefore, would not be considered in computing reimbursement. The computation of reimbursement for these expenses or charges is also subject to the annual \$75 Medicare deductible. Thus, the maximum amount Medicare will reimburse in each calendar year for mental health treatment rendered a Medicare beneficiary on an outpatient basis (assuming the deductible has previously been met) is \$250, which is 80 percent of the product of 62.5 percent of maximum reasonable charges of \$500. In effect, then, there is a net 50 percent coinsurance for mental health treatment, up to the charge limit.

The maximum reimbursement is only one such limitation under Medicare Part B. Other limitations include the following:

- . The reimbursement limit applies to expenses incurred for "physicians' services," with no distinction made between services rendered by psychiatrists and other physicians. In addition, the reimbursement limit does not include the diagnostic services of a physician.
- . Expenses incurred for services rendered "incident to physicians' services" are allowable if the services have been rendered "by employees of the physician," under the "direct personal supervision of the physician." "Direct personal supervision" does not mean that the physician must be present in the same room as the employee. It does mean, however, that the physician must be present in the office and "immediately available" to provide assistance and direction throughout the performance of the service. In addition, the physician bills Medicare for the services provided and is, therefore, the provider of record, rather than the employee provider.

The "incident to" services must also be "usual and common" to the physician's practice. A determination of the adherence to this requirement is made by the Medicare carrier in adjudicating the claim, particularly with respect to coverage of the services. For example, a psychiatric social worker's services may not be covered even if they are performed under the direct personal supervision of a physician if the Medicare carrier does not deem it "usual and common" to the physician's practice. This type of interpretation is likely to differ widely among the entire group of Medicare carriers as well.

Services rendered by the physician's employee outside the office setting are covered only if the physician is present.

Diagnostic services performed by a qualified "psychologist practicing independently" of an institution, agency, or physician's office are covered as "other diagnostic tests," if the physician "orders" such tests. To qualify, a psychologist must either: (1) be licensed or certified for practice, if the State has such a mechanism; (2) hold a doctoral degree in clinical psychology from a program in clinical psychology approved by the American Psychological Association; (3) have an adjudged equivalency to the clinical psychology degree requirements; or (4) be recognized as competent through the American Board of Examinations for Professional Psychology or through endorsement by a State psychological association. It should be noted that psychological tests do not count against the maximum reimbursement limitation and that treatment services rendered by qualified, independently practicing psychologists are not covered.

Another factor that impinges on the ability of Medicare beneficiaries to be reimbursed for needed mental health services is the status of personnel within these ambulatory settings vis-a-vis Medicare regulations requiring physician-delivered services. That is, the majority of persons providing mental health services in nonhospital-affiliated CMHCs, ambulatory mental health clinics, and partial hospitalization programs are not physicians. Thus, much of the cost of delivery of care to the elderly and disabled is not currently reimbursable by Medicare on a national basis.

It is generally accepted that these Medicare restrictions contribute to low utilization of CMHCs and other outpatient and partial hospitalization mental health services by Medicare beneficiaries. Alternatively, it could be said that access to outpatient care is limited. Only four percent of the CMHC population is Medicare-eligible as opposed to 10 percent of the general population.^{10/} The elderly population experiences significant mental health problems just like any segment of society. Yet, it is reasonable to assume that either there are barriers to the use of ambulatory mental health services by beneficiaries because of the limitations on coverage, or beneficiaries are likely to receive treatment in

^{10/} President's Commission on Mental Health. Task Panel Reports: Volume II, 1978, 506.

an institutional setting that is reimbursed under Medicare, or, for whatever reason, the elderly do not seek mental health treatment.

The latest available^{11/} data from NIMH (up to 1978) show that slightly over \$37 million in Medicare funds have been generated by federally supported community mental health centers. This represents about 3 percent of center revenues, or approximately \$61,000 per center. These data emanate from center "estimates" of Medicare reimbursements, reported through the Inventory of Mental Health Facilities. In addition, these data contain no detail regarding the number and characteristics of beneficiaries for whom these costs were accrued, the services rendered for which payment was made (inpatient or outpatient, for example) and their amounts, the staff rendering the services and their qualifications, and the mechanisms utilized to secure Medicare reimbursement.

The President's Commission on Mental Health noted that:^{12/}

Because of the Limited benefit package and the large deductibles, premiums, and copayments, Medicare fails to provide adequate coverage for many of the aged and disabled.

The Commission recommended that Medicare statutes be amended so that:^{13/}

- . Community Mental Health Centers and other organized systems of community mental health care be given provider status
- . Allowable reimbursement for the outpatient treatment of mental conditions be increased to at least \$750 in any calendar year
- . Part B beneficiary coinsurance conform to physical illness coinsurance requirements by reducing that applicable for mental health from 50 to 20 percent.
- . Two days of partial hospitalization be allowed for each day of inpatient care coverage under Part A

^{11/} National Institute of Mental Health. Private Communication, February 1983.

^{12/} President's Commission on Mental Health. Op. Cit.

^{13/} President's Commission on Mental Health. Report to the President: Volume I, 1978, 31.

The HEW Task Force on the Report to the President from the President's Commission on Mental Health recommended that the HEW Secretary prepare legislation to bring about these amendments and that the Secretary initiate a series of research and demonstration projects to involve reimbursement of a limited number of CMHCs and other organized systems of ambulatory mental health care toward this end.^{14/} The Medicare Mental Health Demonstration was an outgrowth of this Task Force, in conjunction with other factors.^{15/}

3. OVERVIEW OF THE MEDICARE MENTAL HEALTH DEMONSTRATION

As noted earlier, the President's Commission on Mental Health recommended that freestanding CMHCs and other nonhospital-affiliated mental health facilities be allowed Medicare reimbursement on a cost-related basis rather than on a fee-for-service basis, without the requirement for direct physician supervision. However, before establishing a national policy permitting a wider range of mental health service settings to be reimbursed on a cost-related basis, it was suggested that demonstration activities be undertaken and evaluated to determine the impact of these changes on the several parties involved in the provision and receipt of mental health services. Also, because qualifications, licensure requirements, and training of nonphysician mental health personnel vary widely by State, establishment of standards for professionals providing services and for supervision by Qualified Mental Health Professionals (QMHPs--as defined in Chapter III) was a requirement that was to be built into the considerations. The Office of the Secretary, HHS, determined that an interagency effort was required to undertake such a demonstration and proceeded to lay the groundwork for the Medicare Mental Health Demonstration (MMHD) project.

^{14/} Report of the HEW Task Force on Implementation of the Report to the President from the President's Commission on Mental Health, December 15, 1978, C8-C-14.

^{15/} For example, it should be noted that, as early as 1972, NIMH recommended demonstration with CMHCs only. Also, the Rural Health Clinic Services Act (P.L. (5-210) required HHS to report to Congress on the advantages and disadvantages of extending Medicare coverage to urban and rural comprehensive mental health centers.

(1) Memorandum Of Understanding

In 1980, several agencies within HHS signed a Memorandum of Understanding (MOU) concerning the development, implementation, and evaluation of the MMHD. The stated interagency effort included the Office of the Assistant Secretary for Planning and Evaluation (ASPE); the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA); and the Health Care Financing Administration (HCFA). The overall purpose of the project was defined as determining the feasibility of reimbursing freestanding CMHCs and other organized mental health settings on a cost-related basis, without the requirement for direct physician supervision of care. It was decided that approximately 45 mental health service delivery sites would receive waivers from the Medicare program, allowing for reimbursement for services they provided to elderly and disabled Medicare Part B beneficiaries.

The demonstration sites were specified as consisting of:

- . Fifteen freestanding community mental health centers providing at least the five initial services required by the then current law, including partial hospitalization. Partial hospitalization would consist of a stay in a CMHC, or other like center, of four or more hours a day over an extended period of time. It could vary from every day to a few days per week. Included in this stay could be such activities as group therapy and occupational therapy.
- . Fifteen smaller, less comprehensive freestanding organized mental health ambulatory settings that met, at a minimum, the site physician supervision standards in the Rural Health Clinic Services Act.
- . Fifteen providers of mental health partial hospitalization that do not operate in conjunction with an organized ambulatory setting.

Expected general results of activities undertaken during the demonstration were stated in the MOU as:

- . Establishment of standards for professionals providing services and determination of methods and rates of reimbursement congruent with the policy of the Medicare program
- . Determination of the effect of expanded coverage on utilization of services by the Medicare-eligible population
- . Documentation of the cost to Medicare for this expanded range of reimbursement for ambulatory mental health services
- . Development of data for the estimation of the costs to Medicare if this range of reimbursement was to be established nationally

Project authority, timing, organization, and management were also specified in the MOU. Essentially, Section 402(a) of the Social Security Amendments of 1967, P.L. 90-248, as amended by Section 222(b) of the Social Security Amendments of 1972, P.L. 92-603 (42 U.S.C. 1395b-1(9)), was cited as authorizing various types of experiments and demonstration projects. Additionally, Section 402(b) authorizes the Secretary to waive compliance with Title XVIII provisions in order to conduct demonstrations authorized under Section 402(a).

With respect to timing, the MMHD was structured into three phases covering a three-year period. Project organization and management, as specified in the MOU, was allocated as follows:

- . Project And Contract Officers, Demonstration Component--HCFA would have responsibility for the development of the demonstration (including all reimbursement functions) as well as for the implementation and monitoring of the project. NIMH would designate an Associate Project Officer to participate in the demonstration project development, implementation, and monitoring. HCFA would designate both Project and Contract Officers to perform the necessary duties, including approving and signing all vouchers and approving deliverables, and to consult with ASPE and ADAMHA in all matters affecting the demonstration component and the integrity and outcome of the overall project.
- . Project And Contract Officers, Evaluation Component--ASPE would have responsibility for the management of the evaluation component. HCFA would designate a Co-Project Officer. The ASPE and HCFA Project Officers would make all decisions jointly and

would have dual responsibility for signing vouchers, approving deliverables, etc. ASPE would designate a Contract Officer and would be responsible for awarding the contract. HCFA and ASPE would agree to consult with ADAMHA in all matters affecting the evaluation component and the integrity and outcome of the overall project.

- . Site Selection And Services Analysis--ADAMHA would develop criteria and propose sites for the demonstration and would provide information on the services provided at each proposed site. ADAMHA would designate a staff person to perform the necessary duties and serve as a contact for ASPE and HCFA staff. The final selection of sites would be approved by the demonstration Project Officers.
- . Project Coordinator--The Project Coordinator, ASPE, would work with the Project Officers and the ADAMHA designee to ensure overall coordination of the various components. This would necessitate field visits and time spent on the demonstration development, reimbursement, and evaluation components. The Project Coordinator would attempt to resolve conflicts between the components that affect the integrity and outcome of the overall project. If resolution were not possible, these conflicts would be referred to the Project Management Team.
- . Project Management Team--HCFA, ADAMHA, and ASPE would designate representatives to serve on the Project Management Team. The team would provide general direction for the project and supervision for the Project Coordinator and Project Officers, review contractual materials and work products, and attempt to resolve conflicts that affect the integrity and outcome of the overall project. Any member of the Team could convene the Team as he/ she deemed necessary.

(2) Organizational Responsibility

The designation of organizational responsibilities was relatively unique in the case of this demonstration. Unlike many demonstrations, the MMHD was an interagency effort that went beyond the commitment of financial resources. In this demonstration, interagency cooperation was a principle that had to be operationalized. Beginning with the setting of policy and guidelines and continuing to substantive as well as technical issues of the MMHD's implementation, the Team concept was adopted as the primary organizational model. In other words, the Team's decisions covered a wide

cross-section of issues even though specific functions were carried out by the appropriate party. There were two Teams: the Project Management Team and the Work Group. Exhibit 1 outlines this overall project organization.

The Project Management Team, as previously stated, was composed of representatives from ASPE, HCFA, and ADAMHA. They set the major policy parameters for the demonstration. These included determining the number of demonstration sites, the type of facilities covered, the service and staff waivers, the dollar limitations, and the length of the demonstration.

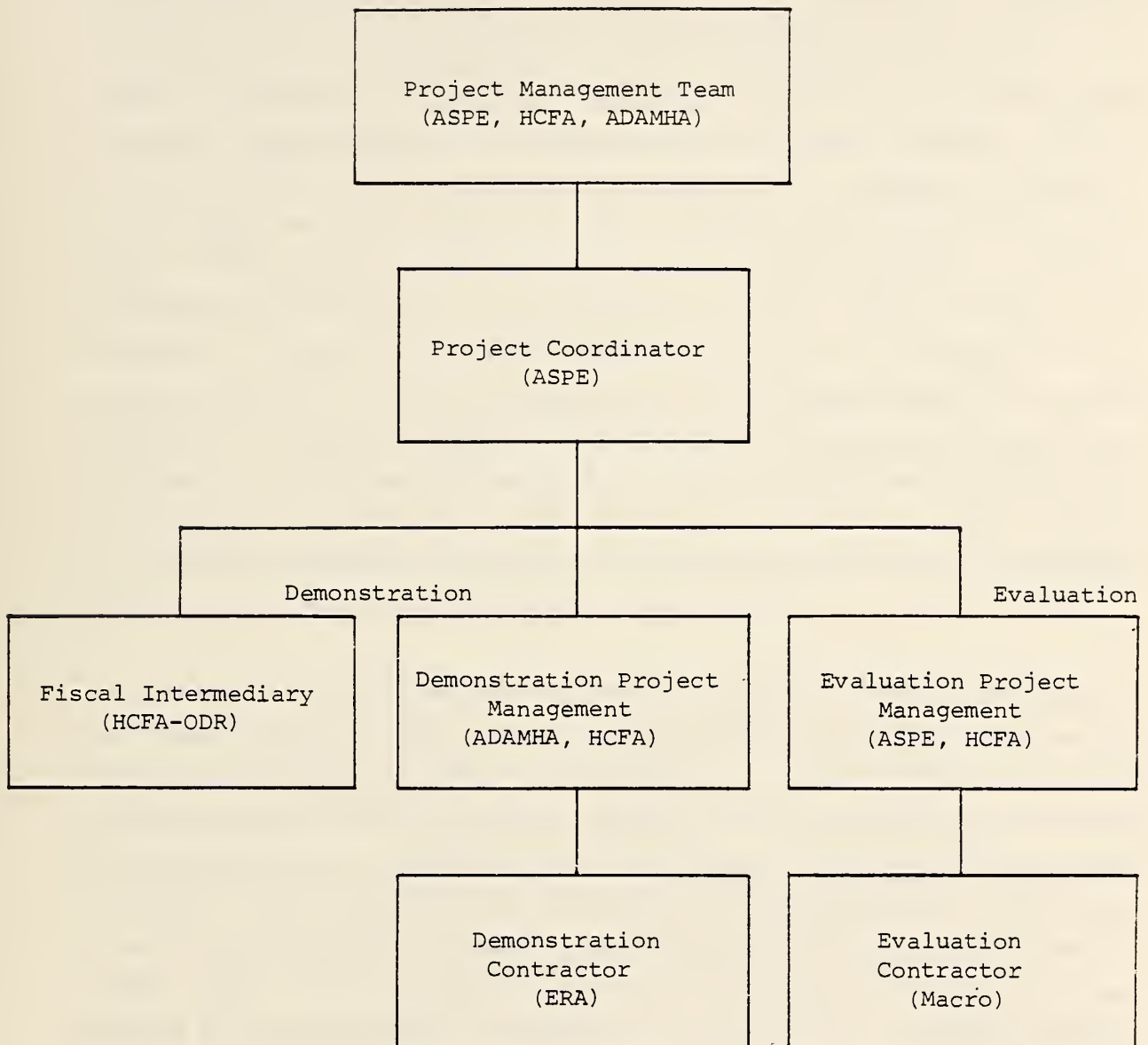
The Work Group was composed of the Project Coordinator from ASPE, the Evaluation and Development Project Officers from HCFA, the Development Project Officer from NIMH, staff from the Office of Direct Reimbursement (ODR) of HCFA, and the Development and Evaluation contractors. Primary responsibilities of the Work Group were to review and come to a consensus on all aspects of the MMHD. This specifically included reviewing:

- . Sites selected
- . Definitions of services and staff
- . Data collection instruments
- . Billing and cost reports and procedures
- . Site visits
- . Site reports
- . Training and technical needs
- . Compliance review

Through this Team process, each agency gave as well as received directions for its particular tasks. With this concept in mind, a summary of the respective roles of the various agencies, agency components, and contractors follows.

First, the Office of the Secretary, or more precisely ASPE, had overall responsibility for coordination of the demonstration and evaluation, both technically and fiscally. However, as specified in the MOU, direct

OVERALL MMHD ORGANIZATION



project management of the evaluation was shared with HCFA. This coordination with HCFA helped to ensure that the appropriate priority was given to program activities, particularly those that were carried out by HCFA. In addition, guidelines, philosophies, and policies utilized in administering the Medicare program had to be integrated with the goals, objectives, and operation of the demonstration and evaluation. The evaluation component of the MMHD was also under the direct technical supervision of the ASPE Project Officer (also the Project Coordinator). This included: (1) project management responsibility; (2) coordination between HCFA and Macro, as necessary to ensure the timely availability of data to be utilized in the analysis tasks; (3) review and approval of the Evaluation Plan; (4) technical assistance in selecting comparison sites; and (5) ensuring that requirements necessary to the successful completion of the evaluation were factored into the design and operation of the demonstration. In addition, ASPE, through the Project Coordinator, retained the responsibility for overall coordination of the various components necessary to the project.

Second, as mentioned above, HCFA, through its Office of Research and Demonstrations (ORD) shared responsibility for direct program management of the evaluation portion of the project. A similar shared responsibility existed between ORD and ADAMHA (NIMH) for the demonstration development and implementation, although in this case contract management was provided by HCFA. The activities of the ORD Office of Demonstrations and Evaluations (ODE) included coordination with other HCFA components as well to ensure that: (1) an internal memorandum of agreement was developed that defined the reimbursement procedures to be followed in the demonstration and specified the demonstration guidelines; (2) appropriate waivers were secured to allow for reimbursement under the demonstration conditions; (3) the specified number of sites, 45, were solicited to undertake the demonstration, and, eventually, the cooperation of requisite sites was secured; (4) the sites met standards that were set for participation in Federal programs, or that these requirements were also waived; (5) coordination in the development and approval of billing forms, cost reporting forms, instructions, and procedures included inputs from all the necessary

parties within HCFA as well as the evaluation contractor; (6) training sessions included all parties who had an operational impact on the sites under the demonstration conditions and the provisions of overall coordination for the regional training activities; and (7) technical guidance was provided to the demonstration contractor, particularly from ODR, to carry out the technical assistance activities of the project that were needed in order that the 45 sites fully comprehended the procedures for reimbursement, reporting requirements, and other operational aspects of the demonstration.

In addition to the functions cited above, ODE also provided coordination and technical direction for the evaluation component of the project. This role included: (1) shared technical project management responsibility (with ASPE); (2) coordination between ODR and Macro and between the demonstration contractor and Macro, as necessary, to ensure the timely delivery of data to be utilized in the analysis tasks of the evaluation; (3) provision of access to other HCFA components to ensure appropriate data collection and database development; (4) review and approval of the Evaluation Plan; and (5) technical assistance in selecting comparison sites.

Third, ODR of the Bureau of Support Services of HCFA played a key role in the development and operation of the demonstration. The major ongoing function that ODR performed was that of fiscal intermediary for the sites participating in the demonstration. During the development stage, however, ODR provided a claims form or billing form to be utilized by the facilities on behalf of the Medicare beneficiaries and cost reporting forms that were used to determine rates of reimbursement to the sites. In addition to designing the forms, ODR prepared several sets of definitions and instructions that included: (1) operational definitions of facilities, clinical records, Medicare beneficiaries, physicians, Qualified Mental Health Providers (QMHPs), other mental health providers, and encounters with these providers; (2) coverage definitions of Medicare Part B, the MMHD project, participating facilities, MMHD services, "reasonable and necessary" requirements of Medicare, and requirements for a Plan of Treatment; (3) the

MMHD reimbursement methodology, including intermediary designation and functions, reimbursement criteria, reimbursement requirements for billing and cost reporting, reimbursement method (interim and final), reimbursement limitations, auditing, and rights to a fair hearing; (4) billing instructions, including detailed explanation of each item on the billing or claim form as well as general instructions concerning frequency of billing, timeliness of billing, and patient authorization for billing Medicare; and (5) cost-reporting instructions, including general and specific guidance to the sites in submission of cost reports. In addition to these efforts, ODR undertook, as part of the solicitation of the 45 sites, to collect information about the candidate MMHD sites. These data included information concerning administrative control, treatment cycle, current billing procedures, accounting, and cost-reporting capabilities of the sites. Some of these data were used in the development of the billing and cost-reporting forms and procedures and the actual selection or rejection of candidate sites to participate in the MMHD.

As noted above, the major role assigned to ODR was that of fiscal intermediary throughout the MMHD. ODR was the payor for Medicare and received and adjudicated the claims and cost reports from the facilities. ODR staff, in conjunction with staff of the demonstration contractor, provided technical assistance to the facilities in correctly completing the billing and cost-reporting forms. Some of this assistance took the form of training sessions that were held just prior to the actual implementation of the MMHD. Other assistance was provided throughout the duration of the demonstration, as difficulties and questions arose. ODR also provided data to both contractors to be used in quarterly and annual reporting.

In addition to these two components of HCFA that were directly involved in the development of the demonstration, several other components also reviewed and commented on MMHD-related materials and activities. These components included both policy and operational entities within HCFA.

Fourth, ADAMHA shared responsibility with HCFA for the development and implementation of the demonstration and its technical direction. ADAMHA provided major input during the development of the billing forms and cost-reporting materials so that proper categories and definitions of mental health services and service delivery personnel would be identified and reflected in the rate-setting process. Additionally, substantial input was provided regarding the selection of facilities for the demonstration.

Fifth, the demonstration contractor, Executive Resource Associates (ERA), had responsibility for developing and carrying out the exact protocol for the demonstration. This included: (1) securing the cooperation of the sites by describing such issues as service coverage, standards for provider staff, facility standards, reimbursement ratesetting, billing, cost reporting, data processing interface with ODR, access to data within the facility, quality of care to be provided, and the waiver provisions of the demonstration. On a task-by-task basis, this initially involved becoming familiar with and commenting on the forms and procedures developed by ODR for the operational aspects of the MMHD. Next, specific protocols for site visits were developed so that baseline information concerning medical records, utilization review procedures, staffing patterns, claims processing, and cost reporting could be assembled that would assist in the determination of the sites' capacity and readiness to implement the demonstration requirements. Following acceptance of the billing and cost-reporting forms by all parties, training sessions for the sites were arranged by ERA to allow ODR and other operational entities to present and explain various aspects of the demonstration and evaluation, especially as they impinged on the operation of the sites themselves. Next, the sites were asked to sign an agreement of participation (Exhibit 2) that legally bound them to the terms and conditions of the demonstration. Following this step, the implementation or reimbursement phase of the project began. The sites were allowed to bill Medicare for services rendered over a two-year period. During this phase, the role of the demonstration contractor was that of providing direct on-site consultation and technical assistance to

HHS, Office of the Secretary

AGREEMENT OF PARTICIPATION

Mental Health Facility
Medicare Mental Health Demonstration
Memorandum of Agreement

1. The mental health facility will provide and receive reimbursement from HCFA for only those defined mental health services related to the demonstration as stated and authorized by the Medicare waivers approved by HCFA.
2. The demonstration begins on the date of the waivers and will be effective for a two-year period.
3. The mental health facility will verify eligibility through the beneficiary's Medicare card. All Medicare Beneficiaries covered under Part B are eligible to receive services under the waivers.
4. The Office of Direct Reimbursement, HCFA, will serve as the Medicare fiscal intermediary for the Medicare Mental Health Demonstration. The attached general reimbursement methodology will provide the basis for all Medicare reimbursement to the demonstration site.
5. The mental health facility will obtain from each beneficiary informed consent to participate in the demonstration and will assure that confidentiality of patient-related data is maintained in accordance with the rules and regulations of the Department of Health and Human Services.
6. The mental health facility will make records of beneficiaries and related data available for review by designated HHS staff and the development and evaluation contractors.
7. The mental health facility is required to fill out all forms and reports as a condition of continued participation in the demonstration and reimbursement for services provided.
8. The mental health facility will cooperate with area carriers, intermediaries, and State Medicaid agencies, in identifying and resolving potential duplication of payments by the standard Medicare and Medicaid programs with respect to services under the demonstration.
9. HCFA can terminate this agreement with the demonstration site after 90 days notice if any section of the agreement or attachments has been disregarded. The mental health facility may initiate action to terminate participation in the project for good cause and must provide 90 days notice to HCFA.
10. The mental health facility must sign the attached DHHS Form 441-Assurance of Compliance with the Department of Health and Human Services Regulation under Title VI of the Civil Rights Act of 1964. If a site has a general assurance form in this regard on file with NIMH, it will not be necessary to file a new form.

11. PHS has issued a general assurance regarding the protection of Human subjects to the sites participating in the demonstration. This form is issued in lieu of the DHHS Form #596.

Name of the Facility

Authorized Legal Representative

Acting Director

Bureau of Program Operations

Health Care Financing Administration

Title

Date

the demonstration sites. The technical assistance was directed at: improving site-specific procedures to correct deficiencies and problems in financial management, cost accounting, billing, and cost reporting; strengthening site-specific operational capabilities relating to reporting and records management procedures; and assuring that site-specific reporting and records maintenance were done properly. These activities were undertaken in conjunction with ODR and coordinated by the ORD Project Officer. Following the operational phase of the demonstration was an orderly phaseout of activities. Many of the later responsibilities of ERA related to the production of final reports, the final collection and reporting of data, and the orderly termination of the operational aspects of the MMHD.

Finally, Macro was responsible for the evaluation of the demonstration. This responsibility included involvement by Macro in all of the activities mentioned above and with all the participants so that both the processes and content of the MMHD were understood and considered in an evaluative sense. In general, Macro was responsible for the assessing the impact of the waivers. Specifically, this has included the:

- . Impact of the Medicare waivers on beneficiaries
- . Impact of the Medicare waivers on the ambulatory mental health settings
- . Cost to Medicare, the settings, and beneficiaries for the waived services

The evaluation contractor was to accomplish these objectives principally through: the analysis of data collected by both HCFA and the demonstration contractor from the sites; analysis of data available on a national basis from NIMH, HCFA, and from a national survey (see Chapter VI); and collection and analysis of primary data from the demonstration and comparison sites.

The evaluation was divided into three phases. Phase I, which was of one year's duration, entailed nine major tasks: (1) design of the evaluation

methodology, considering reimbursement rates and methods, impact of the waivers on utilization of staff and services, impact of the waivers on site revenue sources, costs of the proposed service delivery mode to all participants, and limited treatment outcome measures based on the alternative financing methods; (2) development of data collection instruments, including integration of their use with existing data sources and preparation of Office of Management and Budget (OMB) clearance packages; (3) collection of site-specific baseline data prior to the MMHD concerning service utilization, sources of revenue, staffing patterns, pre-waiver costs, demographic characteristics, administrative and operational costs, and descriptions of the operating philosophies and procedures of the demonstration sites for inclusion as case studies; (4) analyses of changes in the administration and costs of the demonstration settings; (5) analysis of changes in client and service utilization; (6) analysis of changes in the costs to Medicare; (7) analysis of changes in client outcomes; (8) selection of and data gathering from comparison sites; and (9) a survey of the universe of ambulatory mental health settings from which the demonstration sites were selected.

Phase II, continued the activities indicated for the first phase. The Phase II activities benefitted, however, from improvements in operation of the demonstration that were gleaned from the first-year demonstration experience. Additional tasks for Phase II included: (1) comparison of the various mental health settings in terms of information collected; and, (2) collection of information relating to the operation of claims processing as carried out by ODR.

Phase III, included tasks dealing with the integration, compilation, and presentation of information collected over the two prior time periods. Preparation of the Evaluation Final Report, which is the outcome of all evaluation activities, concluded the project.

(3) The Medicare Waivers

As noted earlier, limitations in the Medicare statutes and resulting administrative regulations are thought to have posed a barrier to outpatient mental health treatment for Medicare beneficiaries. These barriers were reduced for the MMHD sites by allowing for reimbursement according to a set of procedures that were implemented pursuant to the authority contained in Section 402 of the Social Security Amendments of 1967 (as amended by Section 222(b)(1) of Public Law 92-603). This Section allows the HHS Secretary to waive compliance with certain requirements of Title XVIII of the Social Security Act. These waivers permitted payments under the demonstration; (1) for service otherwise not reimbursable under this Title and, (2) for costs in excess of those otherwise reimbursable under this Title. More specifically, they called for:

- . Cost-related reimbursement to the three types of facilities
- . Reduction of physician supervision requirements to allow for QMHP supervision
- . Recognition of QMHPs as a direct cost center
- . Elimination of the annual Medicare deductible requirement with respect to mental health services
- . Reduction of the Medicare coinsurance from 50 percent to the regular 20 percent
- . Elimination of the \$250 limit applied mental health reimbursement (for certain facilities only) and raising of that limit to \$750 for others
- . Comprehensive reimbursement for partial hospitalization
- . Reimbursement for therapeutic services provided to the family of the Medicare beneficiary, i.e., family therapy, couple therapy, etc.
- . Direct cost reimbursement of recreation and expressive arts therapy
- . Indirect cost reimbursement of non-QMHP mental health professionals during covered services

II. DEMONSTRATION AND EVALUATION DESIGN

II. DEMONSTRATION AND EVALUATION DESIGN

This chapter describes the approach taken to select the demonstration and comparison sites. The experimental design for the demonstration and evaluation is also described. Both the sampling and experimental design are considered in terms of threats to internal and external validity relative to the hypotheses testing the experimental effects of the demonstration. Latter sections discuss the analytical issues, questions, and hypotheses and the techniques used to test them.

The primary purposes of the Medicare Mental Health Demonstration were to: (1) determine the effects of the expanded Medicare coverage, and (2) document the costs to Medicare of the expanded coverage. Variations in the process and amount of expanded coverage were to be demonstrated for a national sample of 45 sites comprising equal size groups (15) of facilities, i.e., comprehensive community mental health centers, less comprehensive ambulatory mental health clinics, and freestanding partial hospitalization facilities. Resulting outcomes from these sites were to be generalized to the universe of similar beneficiaries and facilities so that sufficient information would be available to make appropriate policy decisions.

To be in the position to make valid generalizations of the results of the MMHD, it is necessary to have both an internally and externally valid experimental design.^{1/} Internal validity is the basic minimum without which the experimental results would be uninterpretable. A design is internally valid if it can be said with confidence that differences in observed outcomes are in fact due to the demonstration effects and not to other factors not controlled for in the design. The more control there is over "threats" to the internal validity of

^{1/} Campbell, Donald T., and Stanley, Julian C. Experimental and Quasi-Experimental Designs for Research. Rand McNalley and Company, Chicago, 1972.

the design, the more plausible it is that the experimental treatment did, in fact, make a difference. With adequate control over possible threats to the internal validity across the experimental sites such as differences in the beneficiary population, different types of programs, different service mixes, and different degrees of implementation of expanded coverage across facilities, it will be possible to say that the detected differences are generalizable to other similar populations of beneficiaries and facilities.

Internal validity is a prerequisite to external validity, which asks the question of generalizability. To what beneficiaries, facilities, reimbursement approaches, and range of coverage can the detected effects be generalized? The selection of the experimental design and the sample sites must be strong in both types of validity to achieve the MMHD evaluation objectives.

1. DEMONSTRATION SITE SELECTION

As agreed in the Memorandum of Understanding between the HHS organizational entities responsible for the demonstration development and evaluation, ADAMHA was responsible for developing criteria and proposing sites for the demonstration. The final selection of sites and alternatives for dropouts was then to be approved by the demonstration Project Officers.

Throughout the final planning stages of the MMHD (summer 1979 through summer 1980), a number of site selection criteria were thrashed out among representatives of the three HHS agencies involved (i.e., ASPE, HCFA, ADAMHA). Some criteria were argued at length; others were decided by fiat. In the end, the following criteria were established:

- . The site could not be owned or operated by a Medicare provider, i.e., could not be hospital-based.
- . Community mental health centers (CMHCs) had to be federally supported, providing at least the five initial services required by Public Law 94-63.

- . The other two categories of programs (ambulatory clinics and partial hospitalization programs) had to meet the site physician supervision standards of Public Law 95-210, the Rural Health Clinic Act.
- . The program had to be licensed by the State, if licensing was required.
- . The partial hospitalization programs should not have an ambulatory treatment component, and, conversely, the ambulatory clinics should not have a partial hospitalization component.
- . All sites had to serve a high percentage of elderly compared to other such sites constituting the universe in each category.

In selecting sample sites that met the above criteria, ADAMHA was faced with a major difficulty--there was no single comprehensive database available that provided the required data elements for the universe of facilities. The best available database was the Inventory of United States Mental Health/Psychiatric Facilities, maintained by the National Institute of Mental Health's Division of Biometry and Epidemiology. There were three important limitations in this database: (1) it did not include all facilities that met the selection criteria, (2) some data items required for selection were not included for all categories of facilities, and (3) the database was outdated.

Comprehensive reports were required from CMHCs on the annual Inventory of Comprehensive Community Mental Health Centers to compose the CMHC database. These data included a number of facility and staffing characteristics, patient demographic characteristics (including age), and other patient data (including referral sources and type of services). Data collected from ambulatory clinics and partial hospitalization programs on the Inventory of Mental Health Facilities were much less comprehensive, including only facility and staffing characteristics and number of persons receiving services, with no demographic breakdowns. Specific items required for site selection were not included as part of the database. Most significant was the lack of the clients' age distribution required for determining the percent of elderly in the client population. Therefore, the total volume of clients served, regardless of age, had to be used as a proxy. Finally, the data used represented the 1975 calendar year.

Because mental health programs may undergo considerable changes from year to year, it is unknown to what degree the 1975 data represent the current universe of ambulatory mental health programs.

Within these constraints, NIMH generated lists from its automated files representing the universe of programs meeting the criteria in each category. Additional screens were conducted for CMHCs using the grants and services files maintained by the Division of Mental Health Service Programs, NIMH, to ensure the currency of the inventory data. Sites were "nominated" from these lists. The "nominees" were reviewed with cognizant ADAMHA Regional Office staff, the National Council of Community Mental Health Centers, the National Association of State Mental Health Program Directors, and cognizant State Mental Health Authorities to obtain their recommendations for or against participation of particular sites. Knowledgeable State staff were also requested to recommend potential sites for selection even though the sites may not have appeared on the list of nominees. As a contingency, 21 additional facilities over the 45 required were designated as alternative sites. Using this approach, it was possible to update some of the missing information about particular facilities, to identify facilities that were clearly inappropriate due to recent occurrences, and to identify new facilities. Because it is unclear that the nominees were systematically identified or that standard criteria were used for all nominations, it is not possible to assess the representativeness of the nominated sample without more information about the universe of facilities.

ASPE telephoned and sent letters of invitation to participate in the demonstration to the 45 nominated facilities and requested letters of intent. With the exception of a few facilities that indicated they did not meet the criteria for participation, almost all indicated an intent to participate. HCFA's Office of Direct Reimbursement then prepared a mail survey guide (pretested at six sites) and sent it to all facilities intending to participate, to collect more detailed and recent program, staffing, service, and financial data. In addition to learning more about the nature of these programs, the data were used as a final check that each participating program currently met all required criteria.

2. EXPERIMENTAL DESIGN

All 45 selected sites agreeing to participate were to be exposed to the variations of the experimental "treatment" (the MMHD). Half of the CMHCs and ambulatory clinics had a \$750 annual reimbursement limit per beneficiary per calendar year and half had no limit. All partial hospitalization programs had no limit. As such, it is possible to test the differential effects of increased benefits with and without a limit (for CMHCs and ambulatory clinics). Thirty matched comparison (control)^{2/} sites were proposed (for CMHCs and ambulatory clinics only) in order to determine whether the observed results would have occurred anyway in the absence of the demonstration. The matched comparison sites serve to partially control for the many internal validity threats. The comparison sites were matched on the basis of those factors most likely to interact with the experimental treatment effects, including State (so that third-party reimbursement environment is identical), staff size and mix, demographic characteristics of catchment area, services provided, and client size and mix (including percent of elderly served). Sites that were as similar as possible to the experimental group were sought, except in the event that proximity could result in contaminating effects.

Using the identical computer printouts from which the demonstration sites were selected, the members of the comparison group were selected using the established selection criteria. Taken into account was the possibility that a number of facilities would decline to participate as comparison sites.

The sample selected was contacted by telephone to elicit their interest in participation. They were also sent letters from ASPE, formally requesting their participation, and a contract to formalize their participation. The list of proposed sites was worked through sequentially until exhausted. In the end, 10 comparison sites agreed to furnish data.

^{2/} The use of the term control site does not imply randomization. Rather, using the site as a comparison, it is possible to partially "control" for internal validity threats.

For the CMHCs and the ambulatory clinics, the overall design is best classified as 2^3 factorial nonequivalent control group design. Although there is not pre-experimental sampling equivalence, since the comparison and experimental groups constitute naturally assembled collections, most of the possible threats to the internal validity of the design are controlled for through the use of the comparison groups. Time series data were collected on the experimental (pre- and post-experimental periods) and comparison groups (post-period) allowing for additional control to internal validity threats because the experimental effect is, in a sense, demonstrated twice: once against the pre-experimental values in its own series, and once against the comparison values. Although highly desirable for determining the equivalency of matched comparison and experimental groups, resource and privacy limitations precluded the collection of pre-experimental data for members of the comparison groups.

In addition to pre-demonstration and post-demonstration comparison of the same beneficiaries in a given site (repeated measures) and the use of comparison sites, statistical controls are also used in this evaluation. Statistical testing of the effects of the demonstration and the various levels of benefit limits include covariates on beneficiaries (those variables not controlled in the design which have significant relationship with the outcome measure). The percent of the explained variance in the outcome measure, due to the presence of the covariate in the model, is then distributed (or controlled in a statistical sense) so that the effect of the demonstration on the remaining variance can be tested for significance. Covariates include: sex, race, marital status, diagnosis, referral source, entitlement, and income.

Given the approach to selecting the demonstration sites and, consequently, the approach required for selecting the comparison groups, the sample is best classified as purposive and is not necessarily representative, in a statistical sense, of the universe of facilities that would meet the criteria for inclusion. As a consequence, there are also a number of possible threats to the external validity of the design that must be considered in making generalizations. At a minimum, it was necessary to learn more about the universe of facilities that would meet the criteria for inclusion in order that valid generalizations, particularly regarding cost impacts, could be made. For this reason, a national

survey of all similar mental health facilities was undertaken to determine the number of existing facilities meeting the precise criteria for inclusion in the demonstration as well as the number meeting similar standards that would be likely candidates for expansion of the waiver conditions in future years.

Exhibit 3 graphically presents the experimental design, and Exhibit 4 enumerates the possible threats to the validity of the design and assesses whether or not the threat is controlled for by the design. For those threats not controlled for by the design, special consideration was given to determining the likely degree to which the threat affects the result.

3. ANALYSIS ISSUES AND QUESTIONS

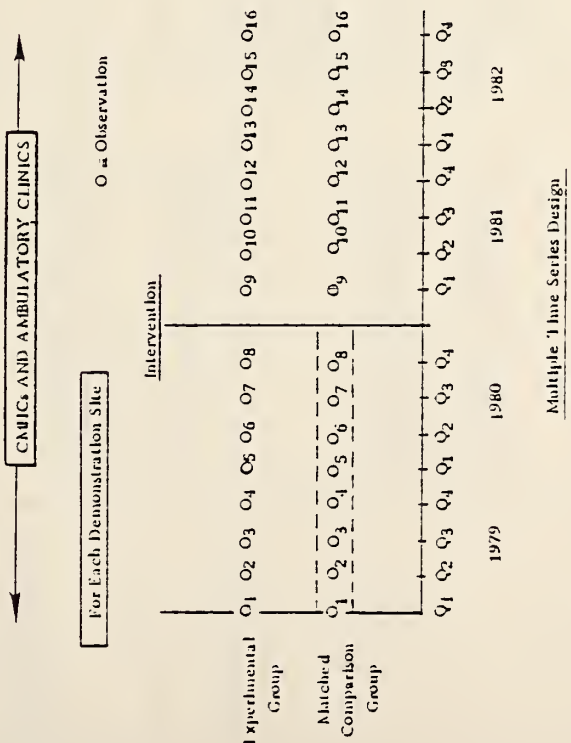
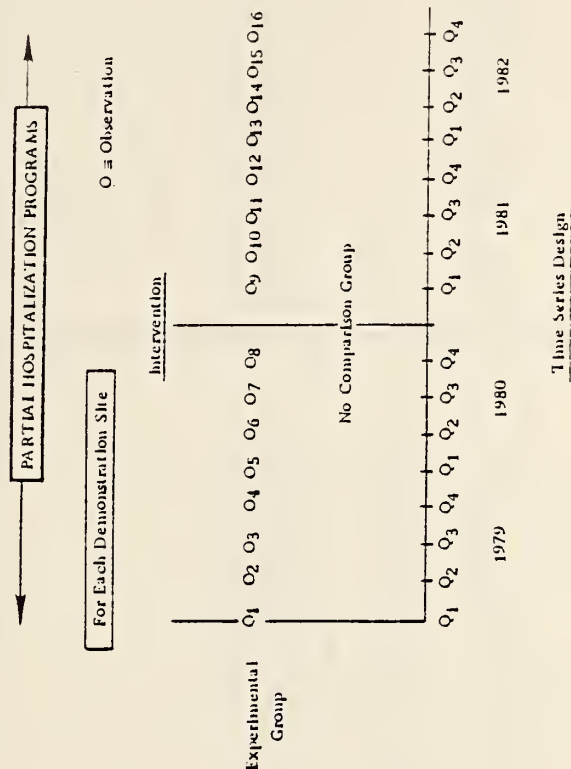
As stated in the Request for Proposal for the evaluation, the overall purpose "is to assess the impact, benefits, and drawbacks of granting Medicare provider status to nonhospital operated CMHC, organized ambulatory mental health service settings, and nonhospital operated partial hospitalization facilities." In conducting these assessments, data were collected and analyzed from virtually all agencies and participants involved in the demonstration, including: (1) the legislative, regulatory, and administrative bases for the demonstration; (2) the universe of ambulatory mental health programs; (3) the fiscal intermediary for the demonstration (ODR); (4) the demonstration and comparison sites; and (5) the development contractor. The assessment focuses on the following primary objectives:

- . To measure the impact of the Medicare waiver on client and service utilization
- . To measure the effects of the Medicare waiver on the administration and operations of the demonstration sites
- . To determine the cost to Medicare for the demonstration benefit package, including possible offsets

As a secondary focus, the evaluation measured and analyzed exogenous variables affecting the programs as well as limited client outcome measures.

HHS, Office of the Secretary

MMHD EXPERIMENTAL DESIGN



Collapsed Across Sites for a Given Point in Time

Collapsed Across Sites for a Given Point in Time

Experimental Treatment*

| | \$750 Limit | No Limit | |
|-------------------|-------------|----------|----|
| CLINIC | 8 pairs | 7 pairs | 15 |
| Ambulatory Clinic | 7 pairs | 8 pairs | 15 |
| | 15 | 15 | 30 |

Not Applicable

* One experimental demonstration site with a matched comparison site

HHS, Office of the Secretary
THREATS TO VALIDITY

CMHCs AND AMBULATORY CLINICS

PARTIAL HOSPITALIZATION PROGRAMS

| Threat | Description | Degree of Control | Degree of Control |
|---|---|---|--|
| <u>Internal Validity Threats</u> | | | |
| History - | The specific events occurring between the pre- and post-measurements in addition to the experimental variable. | Controlled | Possible Threat |
| Maturation - | Processes within participants operating as a function of the passage of time <u>per se</u> . | Controlled | Partially Controlled |
| Measurement Approach - | Changes in the precision of measurements. | Partially Controlled - Different approaches to data collection (on-site versus by mail) for demonstration and comparison groups may result in some noncomparability in measurements. Also, differences in pre- and post-measurement techniques may result in some noncomparability. | Partially Controlled - Differences in pre- and post-measurement techniques may result in some noncomparability. |
| Statistical Regression - | Operating where groups have been selected on the basis of extreme measures on a variable. | Partially Controlled - If comparison groups can be selected with comparable elderly populations to the demonstration sites, this will be controlled. If not, it will be a possible threat. | Possible Threat |
| Selection - | Bias resulting in differential selection of respondents for the comparison groups. | Partially Controlled - Whenever there is not random assignment to comparison groups, there is a potential threat. The closer the matched comparison groups are on the basis of client mix, the more control there will be. | Partially Controlled - The pre-measures can act as a control for the post-measures. |
| Experimental Mortality - | Differential loss of respondents from the comparison groups. | Controlled | Possible Threat |
| Selection-Maturation Interaction | Interaction of differential selection for comparison and demonstration on the maturation processes of participants. For example, if comparison participants were younger than demonstration participants, maturation processes may not be equivalent. | Partially Controlled - See discussion under Selection threat | Possible Threat |
| <u>External Validity Threats</u> | | | |
| Hawthorne Effect - | Participation in the demonstration may increase or decrease participants' sensitivity or responsiveness to the treatment variable. | Possible Threat | Possible Threat |
| Interaction Effects of Selection Bias and Experimental Variable - | Interaction of any selection bias within the experimental effect. | Not Controlled - Due to the process for selecting the demonstration sites | If, in fact, there are so few partial hospitalization programs, the sample may include almost the entire population and generalization may not be an issue, except to the extent that results are generalized to other "similar" programs, e.g., partial hospitalization programs within ambulatory mental health clinics. |

The evaluation involves an extremely wide range of analyses. To conceptualize all of the important components of the evaluation, it is useful to impose an overall framework. The specific analysis issues and question to be addressed for each component of the evaluation are then discussed.

(1) Conceptual Framework Of The Evaluation Of The MMHD

A conceptual framework for the evaluation is presented pictorially in Exhibit 5. As the exhibit shows, the demonstration involved a number of major sequential events, including:

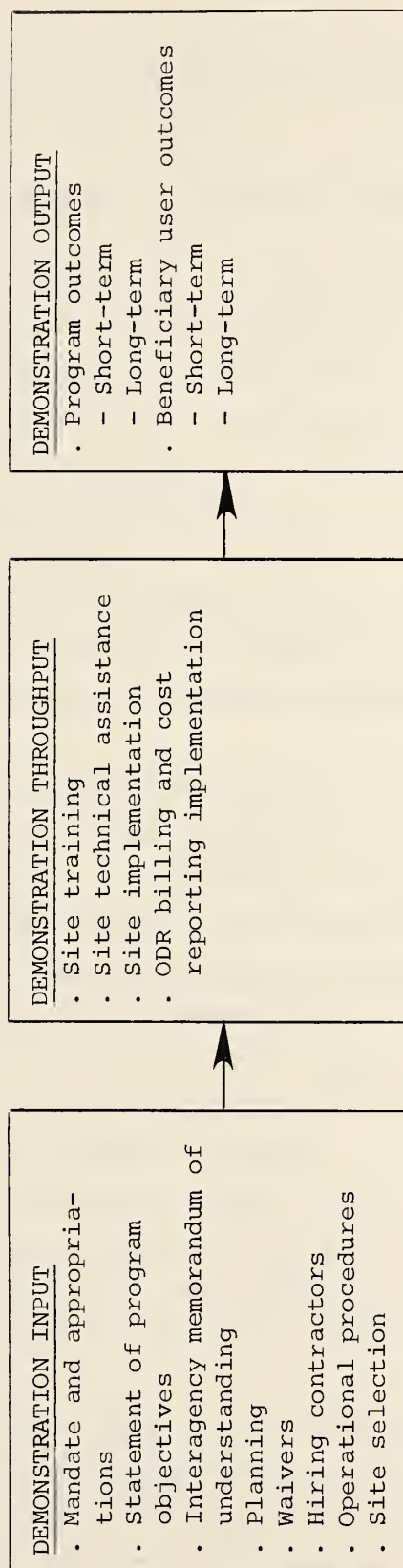
- . Demonstration input
 - Mandate and appropriations
 - Statement of program objectives
 - Interagency memorandum of understanding
 - Planning
 - Waivers
 - Hiring contractors
 - Operational procedures
 - Site selection
- . Demonstration throughput
 - Site training
 - Site technical assistance
 - Site implementation
 - ODR billing and cost reporting implementation
- . Demonstration output
 - Program outcomes
 - .. Short-term
 - .. Long-term
 - Beneficiary user outcomes
 - .. Short-term
 - .. Long-term

As displayed in the exhibit, the overall evaluation can be divided into two components: implementation and process assessment and impact evaluation. It should be noted that there is some overlap between the

EXHIBIT 5

HHS, Office of the Secretary

CONCEPTUAL FRAMEWORK FOR EVALUATION
OF THE MEDICARE MENTAL HEALTH DEMONSTRATION



Evaluation Components

Implementation and Process Assessment

Impact Evaluation

implementation assessment and the process evaluation. Each component is discussed in turn below.

(2) Implementation And Process Assessment

The first part of the implementation assessment involves documenting the sequence of events that took place in planning and implementing the demonstration from the point that the HHS Task Force recommended that a series of research and demonstration projects be conducted through the point that the waivers were actually implemented in the demonstration sites. The documentation of the program input is presented in these first several chapters, including the mandates, program objectives, interagency memorandum of understanding, planning, precise nature of the waivers (including specific definitions), different contractor and agency responsibilities, specific operational procedures, and the site selection procedures.

In the implementation phase, the translation of the demonstration objectives into actual operating procedures and criteria could have led unintentionally to programmatic elements quite different from the initial intent of the program. For example, the cost reporting formats and procedures operationally defined the actual reimbursement the programs would receive under the demonstration. These procedures were critically reviewed to assure that they represented the original policy intent. It is important in the implementation assessment to accurately describe the operational procedures developed by HCFA and NIMH as implemented by the fiscal intermediary (ODR) and the demonstration sites. The waivers, cost reporting, billing and collection procedures, and the definition of services, providers, and conditions must be accurately represented in light of the expected demonstration outcomes.

The second part of the implementation assessment (that part covering demonstration throughput) focuses on the extent to which the above process is actually put in place as originally planned. To interpret the evaluation outcome measures so that appropriate recommendations can be

made, it is necessary to fully describe what the demonstration represents operationally. For example, minimal impact observed at a given site could be due to less than full or inappropriate implementation of the operational process as opposed to the demonstration model itself. Policymakers reviewing the demonstration results must be aware of these factors to make appropriate decisions regarding implementation of the waivers nationally. To this end, individual project descriptions developed through document reviews and quarterly site visits were used to assess the extent to which the waivers, operational procedures, and requirements were fully and appropriately implemented at each site. ODR statistics and data gathered by the demonstration contractor were also used.

Specific issues that are addressed include:

- . When were the waivers approved?
- . How closely did implementation adhere to the original timetable (January 1, 1981 implementation for all sites)?
- . When did each site's participation agreement go into effect?
- . How many sites withdrew:
 - Prior to the training session?
 - After receiving the demonstration materials?
 - After participation in the training sessions?
- . What were the perceived reasons for withdrawal from the demonstration?
- . How were alternative sites selected?
- . What procedural and/or definition modifications were required of demonstration guidelines in order to accommodate reality?
- . What facility changes were required to comply with the demonstration requirements relating to:
 - Staffing?
 - Billing and accounting procedures?
 - Service delivery (e.g., QMHP supervision and new services)?
 - Clinical recordkeeping?
 - Client processing?

- . When did each site begin to provide services under the waiver provisions?
- . When do ODR's work load statistics show that the site's billing procedures were operating routinely?

The bottom line of the implementation and process assessment is determination as to whether the demonstration waivers were fully and appropriately implemented, at what point in time, and with what exigencies. This information provides the content in which to interpret the observed trends in the other measures, by providing a time sequence of events relating to the implementation.

The implementation and process evaluation was carried out largely through site visits and the results are documented primarily in the case studies of the sites. Interviews with personnel at the demonstration sites provided much of the process evaluation data. Quantitative data were collected from the quarterly cost reports and billing forms submitted to ODR as well as the site visits. Process evaluation involves qualitative assessments as well as quantitative activity and cost measures and addresses the following analytical questions.

Qualitative Assessment--The qualitative assessment consists largely of document reviews and site visits involving interviews with key program staff at ODR and the demonstration sites. The following questions were addressed:

- . What are the rates and methods used by the fiscal intermediary (ODR) for reimbursing the sites?
- . Are sites maintaining adequate personnel controls within the requirements of the demonstration?
- . How have site administrative mechanisms adapted to the overall demonstration requirements?
- . What is the effect of the demonstration requirements on service administration and management?

- . What is the effect on the sites of standards, e.g., QMHPs, developed for the demonstration?
- . What is the type and extent of physician supervision within the standards set?
- . What are the staffing patterns?
- . To what degree is appropriate reimbursement from Medicaid and other third-party payors pursued for Medicare-paid claims?

Quantitative Activity And Cost Measures--The quantitative activity and cost measures were derived from ODR's billing and cost reporting system, as well as minimal additional data collected from the sites. The following analysis questions are addressed relating to the number of beneficiaries served, the associated costs, and ODR billing and processing statistics:

- . What are Medicare expenditures, both in total and by type of provider for each site?
- . What is the number of Medicare beneficiaries served, in total and by type of provider?
- . What is the number of claims paid, in total and by type of setting?

(3) Impact Evaluation

The final evaluation component--impact evaluation--involves obtaining quantifiable as well as nonquantifiable measures of the impact of the demonstration waivers as implemented. As distinguished from implementation analysis and process evaluation, impact evaluation will focus on a number of specific beneficiary outcome measures relating to service utilization and program outcome measures relating to shifts in service delivery and changes in the cost of providing services. For the most part, quantitative measures were taken and analyzed statistically. There are six major analysis questions addressed in the impact evaluation:

- . How was the utilization of ambulatory mental health services affected by the demonstration?
- . How was the beneficiary population affected by the demonstration?

- . How were the costs, charges, and reimbursements for ambulatory mental health services affected by the demonstration?
- . How were the characteristics of participating sites affected by the demonstration?
- . Was the quality of care rendered beneficiaries affected by the demonstration? If so, how?
- . Were there offsets to other services paid for by Medicare?

Two years of the demonstration may not have provided sufficient time to detect some long-term changes in utilization patterns among the beneficiaries or shifts in service delivery among the providers because the program sites may not have reached a state of equilibrium. However, other impacts were expected to be immediate and the resulting effects to stabilize in the demonstration period.

With this in mind, each of the above major analysis questions is discussed below and specific questions are formulated. The quantifiable analysis questions were stated in terms of null hypotheses for statistical testing. Directional alternative hypotheses were also specified in those cases where there was a preconceived notion of the expected outcomes (to increase the power of the statistical tests).

How Was The Utilization Of Ambulatory Mental Health Services Affected By The Demonstration?

The demonstration was an outgrowth of a need expressed by the President's Commission to expand Medicare benefits for ambulatory mental health services. The parameters of the demonstration waivers were expected to notably affect the utilization of services by beneficiaries at the demonstration sites. First, the quantity (number of services or encounters) and intensity (services/unit of time) of services utilized was expected to increase as a direct function of the \$750 limit and the no limit conditions. Outpatient service utilization was expected to increase relative to inpatient services as a result of increasing the incentives for outpatient services. The no limit condition in some sites was expected to provide an indication

of how much of an increase in service utilization could be expected under no limit conditions. Comparative analyses of the \$250 (comparison sites), \$750, and no limit sites (for CMHCs and ambulatory clinics only) were expected to provide useful experience measures for establishing future policy regarding limits. Of particular interest is the analysis of the number of beneficiaries whose claims exceeded the limit.

In addition to the quantity of services, the types of ambulatory mental health providers and services were expected to be influenced by the demonstration waivers. With the expansion of the supervisory role to include QMHPs (from physicians only to psychologists, psychiatric social workers, and psychiatric nurses) and the inclusion of ancillary services, sites could be reimbursed for services under more flexible conditions that are perhaps more in tune with the realities of current clinical practice. More varied types of services were expected to be utilized by the beneficiaries under the demonstration as the sites were financially permitted to go beyond the traditional physician-supervised services provided by others.

Similarly, the average length of time in treatment for beneficiaries (from intake to discharge) was expected to increase under the demonstration waiver conditions. It not possible to assess how much of an increase would be expected for three reasons, however. First, many sites did not have a "meaningful" discharge point--clients remain in treatment indefinitely. Second, it is difficult to speculate on the relative influence of "good clinical practice" or regional/societal expectations, etc., versus financial incentives on time in treatment. Third, two years is insufficient to capture a large enough sample of clinical treatment "completers" in the pre- as well as the post-periods.

The specific analysis questions addressed are as follows:

- . How were the types of ambulatory mental health services utilized by the beneficiaries affected by the demonstration?
- . How was the quantity of ambulatory mental health services utilized by the beneficiaries affected by the demonstration?

- . How was the intensity of ambulatory mental health utilization affected by the demonstration?
- . How did the types of providers of ambulatory mental health services utilized by the beneficiaries change as a result of the demonstration?

How Was The Beneficiary Population Affected By The Demonstration?

Although the elderly constitute over 10 percent of the population, historical use of inpatient and outpatient mental health services among the elderly is lower than any other adult age group, as shown below.

Admissions* 65 Years of Age and Over as a Percent of
Total Admissions to Selected Mental Health Services,
U.S., 1971 and 1975^{1/}

| | <u>1971</u> | <u>1975</u> |
|-----------------------------------|-------------|-------------|
| All Services | 4.8 | 4.8 |
| State and County Mental Hospitals | 8.5 | 5.3 |
| Private Psychiatric Hospitals | 11.5 | 9.9 |
| General Hospital Inpatient Units | 7.0 | 7.4 |
| Community Mental Health Centers | 3.6 | 4.0 |
| Outpatient Psychiatric Services | 2.1 | 3.8 |

* Excludes nursing home data.

Most of the elderly do not utilize the services of private psychiatrists because they cannot afford to do so. In the past, the elderly who were mentally ill were placed in mental hospitals for lengthy stays; more recently (in the interest of cost containment) they are being transferred to less intensive medical care environments such as nursing homes. Releasing mentally ill elderly persons from mental institutions has not meant a return to the community where they might receive outpatient care, but rather placement in other institutions, like nursing homes, where they may receive little or no psychiatric care. Those elderly with behavioral problems are

^{1/} Data from the Division of Biometry and Epidemiology, NIMH, as reported in "Reported Required by P.L. 95-210 on the Advantages and Disadvantages of Extending Medicare Coverage of Mental Health, Alcohol, and Drug Abuse Centers," Transmitted to Congress, October 1978.

typically not admitted by nursing homes and often are hospitalized or institutionalized once the condition becomes serious.

There are limited data regarding the elderly's use of CMHCs; however, those data available indicate that very few elderly use these services. In 1975, it was estimated that only 4 percent of the CMHC admissions were for the elderly^{2/} compared to the overall population base of over 10 percent; the elderly were clearly underrepresented. Although comparable data are not available for the ambulatory clinics and partial hospitalization programs, there is little reason to believe the experience is much different with these facilities.

Of the relatively few elderly admitted to CMHCs in 1975, a larger portion were admitted to inpatient care (one-third) than for the younger adult population group (less than one-fourth).^{3/} Much of this differential is thought to be due to Medicare's limited coverage of outpatient services and corresponding incentives for inpatient care.

Private health insurance policies also limit and in many cases exclude coverage for mental health treatment. Outpatient mental health benefits are usually less inclusive and more restrictive than corresponding inpatient mental health benefits. Many of the outpatient services provided as an integral part of the treatment plan in CMHCs are simply not covered by private or public insurers because they are reluctant to expand coverage when services deviate from the strict medical treatment model and because many of the staff members are nonphysician mental health professionals.

The demonstration waivers were expected to increase the availability of ambulatory mental health services for the elderly by giving the centers and clinics provider status, raising the \$250 limit on outpatient services

^{2/} Data derived from the Inventory of CMHCs from (ADM 25-3) and annual survey of federally funded CMHCs conducted by NIMH, Division of Biometry and Epidemiology.

^{3/} Ibid.

under Part B, reducing the effective coinsurance, removing the deductible, and relaxing the physician supervision requirements. The major advantages expected to be derived were:

- . The ambulatory programs constitute a more easily accessible source of mental health services for the elderly.
- . It is likely that elderly persons who need mental health care, who might have otherwise become inpatients for lack of access to outpatient services, could be treated less expensively as outpatients in the ambulatory programs.
- . Elderly who are treated in the ambulatory programs may also take advantage of the wide array of assessment, treatment, follow-up, and ancillary services provided by these programs.
- . Outreach services provided by ambulatory programs could help to prevent elderly or disabled persons with severe psychological disorders, who are reluctant or unable to come into treatment, from becoming more severe and requiring subsequent hospitalization.
- . Increases in the reimbursement limits would encourage beneficiaries to make better use of outpatient mental health services as opposed to institutional care.

The actual utilization of the ambulatory mental health services by beneficiaries under the waivers may have been largely a function of the advertising efforts of the demonstration sites and the effectiveness of the referral networks in the communities. Past experience with mail advertising of similar demonstration benefits have shown less than desirable results. Out of a pool of approximately 50,000 beneficiaries, only about 100 participated in a similar effort in a recent Colorado demonstration.^{4/}

The participation rates in the current demonstration were a result of the effectiveness of the site's public awareness programs for the elderly. These public information efforts were expected to be in large part a function of how much the program expected to benefit from such efforts and

^{4/} Evaluation of the Colorado Clinical Psychology/Expanded Mental Health Benefits Experiment, Report submitted to HCFA by the SRI International, September 1979.

from participation in the demonstration itself. If the program perceived a substantial financial incentive to increased provision of services to Medicare beneficiaries, one could expect a more intensive campaign.

Referral patterns into the mental health system are also important to the utilization of services because access to needed care could be severely limited by an inadequately functioning referral system. This is especially important because only a small percentage of clients with mental health problems go directly to a mental health provider. Once again, the perceived incentives of the programs to enhance their referral network was expected to have a direct impact on the utilization of services by beneficiaries.

Specific analytical questions relating to utilization and referral networks included:

- . How were the sites' ambulatory mental health services utilization rates of beneficiaries in their service area affected by the demonstration?
- . How was the proportion of the sites' ambulatory mental health case load who are beneficiaries affected by the demonstration?
- . Did the sites reach a new population under the demonstration or did they care for the same population?
- . Were the referral sources for the beneficiary users to the setting affected by the demonstration? If so, how?

Demographic characteristics other than size also relate to the utilization of mental health services and are used as control or explanatory variables in the analysis of the effects of the demonstration waivers on service utilization. Data generally support that females use more mental health services than males. Data on use by other characteristics tend to be less definitive; however, relationships to service use do appear for race, occupation, education, and income. The location of residence of beneficiaries (i.e., metropolitan, nonmetropolitan) may also relate to a combination of factors affecting the use of mental health services. Rural beneficiaries often have less

access to mental health providers than do urban beneficiaries, hence it may be more difficult for them to seek care. In addition, other factors surrounding the nature of rural life, e.g., a philosophy of "taking care of your own," may decrease the apparent need for mental health services.

The following questions concerning the relationship between demographic characteristics and service utilization were addressed:

- . How were the overall demographic characteristics of the sites' beneficiary case load affected by the demonstration?
- . Were the demographic characteristics of beneficiary users related to the utilization of ambulatory mental health services?
 - Rate of utilization
 - Type of services
- . Was the relationship between demographic characteristics and service utilization affected by the demonstration?

The provider's diagnostic categorization of beneficiary users was also expected to relate directly to the type of services, rate of utilization, and length of time in treatment and are also used as a control or explanatory variable in the analysis of the effects of the demonstration waivers on service utilization. Therefore, the following questions were addressed:

- . Did the provider's diagnostic categorization of beneficiary users relate to the utilization of ambulatory mental health services?
 - Rate of utilization
 - Type of services
- . Was the relationship between diagnostic categorization and service utilization affected by the demonstration?

How Were The Costs, Charges, And Reimbursements For Ambulatory Mental Health Services Affected By The Demonstration?

One of the primary purposes of the evaluation was to determine the effect of the waivers on the cost of the demonstration benefits to Medicare, the beneficiaries, and the facilities. Increases in the annual limit for each

beneficiary should have resulted in a direct increase in cost to Medicare. The extent of the per beneficiary increase under the \$750 limit and under the no limit conditions was measured for those services applied to the limit under the waivers as well as for those services not applied to the limit.

The facilities were reimbursed on the basis of reasonable costs for specific services as computed initially in the annual budget and cost report and updated in the quarterly cost reports (see Chapter III for a description). It was expected that these costs would be affected by participation in the demonstration as well as other factors (including inflation). For example, increases in the number of beneficiary users may have resulted in economies of scale. Cost savings may also have resulted from the increased use of nonphysician providers as permitted under the demonstration waivers.

Resulting changes in the annual cost to beneficiary users were also examined. It is difficult to predict the direction of these cost changes because there are many competing factors. Reduction of the effective coinsurance for covered service charges from 50 to 20 percent should have resulted in less cost to the beneficiary. Waiving the annual deductible may also have resulted in a direct cost savings to the beneficiary. Expected increases in the intensity of services should have resulted in an increase in the aggregate coinsurance amount. Extension of the \$250 limit would have resulted in a savings to those beneficiary users who went beyond this limit and were liable for payment. Reimbursement on a reasonable cost as opposed to a reasonable charge basis may also have tended to alter the cost to the beneficiary. Clearly, there are many other factors that had to be considered in these analyses, including:

- . Other third-party payments (e.g., Medicaid and private insurance) for coinsurance and charges beyond the limit
- . The provider's policy toward collection of coinsurance
- . Sliding-fee scales applied to the coinsurance amount
- . Charges for and costs of services not covered under the demonstration
- . Other provider sources of funds

Some facilities participating in the demonstration had a detailed charge structure for specific services covered under the demonstration. Others, which did not have the need for such a charge structure, had to develop one (particularly for ancillary services). As both types of facilities became more accurate in projecting their actual costs of specific services, their charges were expected to change to reflect these costs. Trends in the changes in these charges for specific services for specific provider types were tracked to determine if any systematic changes resulted.

Changes in the Medicare and gross reimbursement rates per beneficiary and per service covered under the demonstration were also measured. Obvious increases in Medicare reimbursement rates per beneficiary were expected. Not so obvious gross reimbursement rates (from all sources) were also measured. It was not obvious whether the demonstration would affect reimbursement from other sources (e.g., individual, private insurance, other third-party payors, and grants).

One side effect of the demonstration is also of interest. It relates to the establishment of "bad debts" for beneficiary users. In the past, most facilities have not used a cost accounting system that included a line entry for bad debts. With the advent of third-party insurance reimbursement and its typical requirements for deductibles and coinsurance, however, the facilities were confronted with a new situation. Under Medicare, they must make an attempt to collect these amounts, unless it can be shown that the beneficiary simply cannot pay. Thus, policies and procedures for handling bad debts had to be developed by almost all facilities for the demonstration.

Participation in the demonstration resulted in added paper work and other administrative chores. To some, already equipped with adequate billing and management information systems, the impact was negligible. To others, the increased cost of setting up the required administrative mechanisms may have outweighed the benefits of participation in the demonstration. Unfortunately, it was not possible to quantify the marginal administrative costs and the variability across programs due to the

requirements of the MMHD. The demonstration was simply not designed to include this level of cost finding.

With regard to charges, costs, and reimbursements, however, the specific analysis questions addressed include:

- . What were the effects on facilities' charges for ambulatory mental health services?
- . What were the effects on per beneficiary charges for ambulatory mental health services?
- . What were the effects of the \$750 limit?
- . What were the effects on the unit costs to Medicare for providing ambulatory mental health treatment under the MMHD?
- . What were the effects on per beneficiary costs for ambulatory mental health services?

How Were The Characteristics Of Participating Sites Affected By The Demonstration?

To participate in the demonstration, there were a number of specific requirements each provider site must meet. These requirements, described in Chapter III, relate to:

- . Physician supervision practices
- . Billing policies and procedures
- . Collection policies
- . Range of services provided
- . Quality assurance mechanisms
- . Service supervision policies and procedures
- . Clinical record-keeping requirements

Some sites had to make rather dramatic changes to meet all of these requirements; for other sites, only minimal changes were required. Other site practices were expected to change as a result of the demonstration participation. These included staffing patterns and client flow processes. Changes in these qualitative characteristics were documented in the site visits and analyzed. The nature and extent of the resulting changes in

site characteristics will be important to consider in the formulation of national policy.

The specific analysis questions addressed included:

- . How were the staffing patterns affected by the demonstration?
- . How were the physician supervision practices affected by the demonstration?
- . How were the sites' client flow processes affected by the demonstration?
- . How were the sites' billing policies and practices affected by the demonstration?
- . How were the sites' collection policies and practices affected by the demonstration?
- . Did the billing and collection policies and practices for beneficiaries differ from those for:
 - Medicaid only clients?
 - Medicaid/Medicare crossovers?
 - Clients with other payor sources?

If so, how?

- . How was the number and range of reimbursable services affected by the demonstration?
- . How were the sites' quality assurance (e.g., utilization review or peer review) mechanisms affected by the demonstration?
- . How were the service supervision policies and procedures affected by the demonstration?
- . How were the sites' clinical record-keeping systems affected by the demonstration?

Was The Quality Of Care Rendered Beneficiaries Affected By The Demonstration? If So, How?

One of the concerns of providing for Medicare coverage of mental health services provided in ambulatory settings is the difficulty of ensuring

the quality of care, particularly as nonphysician supervised care is reimbursed. The majority of persons providing mental health services in ambulatory settings are nonphysician professionals whose qualifications and training vary widely. Nonphysician mental health professionals are licensed in many States, but the standards that are applied vary widely from one State to another.

Few mental health training programs throughout the country offer special training oriented to the particular needs of the elderly. Also, because ambulatory settings primarily serve persons under age 65, their staffs are less familiar with problems of the aged. Medicare reimbursement in ambulatory settings raises the additional concern that inadequately trained professionals may be treating the elderly with mental problems.

On the other hand, one can argue that less desirable and appropriate institutionalization can be largely avoided through provision of ambulatory mental health services. Where adequate social support systems are available, allowing the elderly person to remain in the community, ambulatory mental health settings can provide the required services that would otherwise require institutionalization. Diverting the elderly with mental health problems from an institutional placement will, in most cases, result in a higher quality of life and often higher quality of total health care.

There is little basis upon which to hypothesize that the quality of mental health care provided in all settings to beneficiaries participating in the demonstration would increase or decrease as a result of the demonstration waivers. However, it was important to document any observed changes and to attempt to establish casual links to the demonstration waivers. One should have at least expected that the quality of care provided to the beneficiaries was maintained at a level similar to that found prior to the demonstration (or at a level in the absence of the demonstration) in order to expand the waiver package to all beneficiaries in future years.

Unfortunately, quality of care assessments in the mental health field are by no means refined. In fact, there are virtually no quality of care

standards that relate to mental health treatment. For the most part, then, this forces the use of gross proxy measures of quality of care.

Traditionally, quality of medical care assessments have fallen into one of three types of measures: structure, process, or outcome. The structure refers to adequate resources (e.g., adequate staff as determined through certification and licensing procedures) for providing care; the process refers to appropriate diagnoses and treatments; and the outcome refers to improved health for the individual. The structure considerations are usually dealt with by credential committees. Process and outcome measures are dealt with by peer review activities and clinical assessments.

For the MMHD, several structural quality assurance measures were put into place. They included requirements for the inclusion of staff in the QMHP category, with resulting restriction of supervision to that group of professionals. In addition, a written utilization review plan was required. Finally, periodic review of the required treatment plan by a psychiatrist was also stipulated. Compliance reviews of these aspects (as well as many others) were carried out during the demonstration, and technical assistance was provided by the demonstration contractor to help correct deficiencies.

The quality of care measures used in the present evaluation were primarily of the third type--gross clinical outcome measures of the mental health status of participating beneficiaries. Two primary measures were utilized, both taken at the point of discharge from treatment: (1) the reason for the discharge and (2) the gross clinical impression of the client's mental health status (i.e., improved, not improved, regressed). Granted these are not refined measures of the quality of care; however, they provide valid and reliable data for the purpose of establishing overall trends in quality of care for aggregate beneficiary groups.

In summary, the following analysis questions were addressed regarding quality of care:

- . How were the gross clinical outcomes of ambulatory treatment for the beneficiaries affected by the demonstration?
- . What were the effects of structural and process quality assurance measures put into place for the demonstration?

Were There Offsets To Other Services Paid For By Medicare?

After the start of the MMHD and its evaluation, the issue of the demonstration offsetting existing costs to Medicare for the beneficiaries served by the demonstration sites became more important and more focused. The examination of such costs is both quantitative and qualitative, and it is limited by the availability of data.

There are four basic issues pertaining to the impact of the MMHD on utilization and cost of mental health services reimbursed by Medicare:

- . Whether or not Medicare beneficiaries began to use mental health services for the first time
- . Whether or not there were changes in the use of services or sources of payment for services received; e.g., out-of-pocket expenditures for Medicare beneficiaries who were treated at the demonstration sites prior to the waivers
- . Whether or not Medicare beneficiaries shifted their use of mental health services from traditional Medicare providers--i.e., inpatient and outpatient settings (hospital outpatient departments, physician offices, and physician-directed clinics)--to demonstration sites
- . Whether or not Medicare beneficiaries' use of all health services was affected by the demonstration

The first issue, also discussed previously in the chapter, focuses on whether the demonstration sites, during the demonstration period, attracted and served Medicare beneficiaries never provided previously with mental health services. In a psychiatric epidemiology sense, this is termed "incidence" of new cases of a mental disorder. The converse is that the demonstration sites may have, during the demonstration period, served beneficiaries provided mental health services previously at either the sites participating in the demonstration or elsewhere. This is termed "prevalence," meaning cases already existing or known for the time period

of the study. The specific analytical questions addressed regarding this issue are as follows:

- . How was the proportion of demonstration site caseloads of Medicare beneficiaries never having received mental health services affected by the demonstration?
- . Of those Medicare beneficiaries with a previous mental health treatment history, how was the proportion of beneficiaries served by specific service providers affected by the demonstration?

The latter question is particularly important. For example, whereas the demonstration sites could conceivably experience no changes in the relative proportions of "existing" and "new" cases, it is possible that there could be shifts in the types of mental health treatment received by the beneficiaries (e.g., from outpatient to partial hospitalization at the demonstration sites) or shifts in the types of providers of such prior services (e.g., from inpatient facilities or private practicing psychiatrists to ambulatory mental health programs).

The second issue focuses on whether there were any changes in either the types or amounts of services received or the sources of payment for such services by Medicare beneficiaries who entered treatment at the demonstration sites prior to the waivers and continued treatment into the demonstration period. Specific analytical questions addressed regarding this issue include the following:

- . How was the utilization of services by Medicare beneficiaries treated at demonstration sites prior to the waivers and into the demonstration period affected by the demonstration?
- . How were the demonstration sites' policies and procedures regarding billing and collecting for services rendered such beneficiaries affected by the demonstration?
- . How were the costs to Medicare, to the beneficiary, and to others for services provided to such beneficiaries at the demonstration sites affected by the demonstration?

Each of these questions is important in isolating and understanding the effects of the demonstration. First, with the more comprehensive benefits

of the demonstration, it is possible that the type or amount of services provided Medicare beneficiaries treated at demonstration sites prior to and into the demonstration could have changed. For example, a beneficiary in the pre-waiver period could have been in a medication clinic, receiving intramuscular injections of Prolixin and physician services as prescribed treatment for his or her mental disorder (and, coincidentally, reimbursable under Medicare Part B). However, in the post-waiver period, this same beneficiary could also have been receiving partial hospitalization services, as an illustration, as well as the medication clinic services. Such a change could have occurred as a result of needed, additional service, or in instances where clinical treatment follows from reimbursement potential, or due to these and other factors.

The third issue focuses on more global economic questions. Prior to the demonstration, Medicare beneficiaries' mental health care could have been rendered by a number of providers under both Parts A and B; some or all of such care may or may not have been reimbursable by Medicare. For example, Part A could have been used to pay for inpatient hospital services, extended care services, and/or home health services for treatment of the beneficiary's mental disorder. Similarly, Part B could have been used to pay for physicians' services, services and supplies furnished in connection with and incident to physicians' services, outpatient hospital services, and/or home health services for treatment of the beneficiary's mental disorder. The demonstration itself considered only changes in Part B coverage with respect to physicians' services and "incident to" services. Consequently, any beneficiaries participating in the demonstration could have used, as needed or ordered, other Part A and Part B services for the treatment of their mental disorders, rendered by any of a number of "qualified" providers. Of interest here is the historical perspective on utilization of Medicare-covered services and, ultimately, the cost to Medicare. The specific analytical questions addressed in this area are as follows:

- . What were the costs to Medicare for mental health treatment in geographic areas served by the demonstration sites prior to and during the demonstration?
- . Did Medicare beneficiaries shift their use of mental health services from traditional, "qualified" Medicare providers (i.e., inpatient and outpatient hospitals, physician offices, and physician-directed clinics) to the demonstration sites?
- . Of those beneficiaries who shifted, are there any compensatory savings to Medicare associated with the shifts?

The first question entails the aggregate beneficiary experience in the utilization of mental health benefits (and the associated costs to Medicare) in the geographic areas served by the demonstration sites both prior to and during the demonstration. Recognizing that such costs could be attributable to any Medicare-covered service rendered by any Medicare-qualified provider, this question emphasizes, at a macroeconomic level, the costs to Medicare associated with the population that may avail itself of demonstration benefits. Thus, this question examines the impact of the demonstration on the total cost to Medicare for the treatment of mental disorders--to the extent possible through existing data sources. The other two questions examine, at a microeconomic level, the utilization and costs attributable to specific types of mental health treatment (e.g., inpatient hospital or skilled nursing facility, with specific emphasis on any changes in specific providers or services--also, to the extent possible, through existing data sources.

The fourth issue focuses on even more global economic questions. Mental health services are but some of the benefits covered by Medicare which a beneficiary could use. Considerable research has been directed at the question of whether the inclusion or expansion of a mental health benefit in a health insurance program serves to curtail or reduce the use of other benefits. The specific analytical questions addressed in this area are as follows:

- . What were the costs to Medicare for health care in geographic areas served by the demonstration sites prior to and during the demonstration?
- . For those beneficiaries served at demonstration sites during the demonstration period, were there any compensatory savings to Medicare for all health services covered by the Medicare program?
- . For those beneficiaries entering treatment at the demonstration sites during the demonstration period, were there any compensatory savings to Medicare for all health services covered by the Medicare program?

The first question entails the aggregate beneficiary experience in the utilization of health benefits (and the associated costs to Medicare) in the geographic area served by the demonstration sites both prior to and during the demonstration. The other two questions examine, at a micro-economic level, the utilization and costs attributable to health care for those beneficiaries served at any time during the demonstration (the second question) and those beneficiaries entering treatment at demonstration sites in the demonstration period (the third question).

The above questions are particularly important in determining if there are any compensatory offsets to Medicare due to the demonstration. Although aggregate Medicare reimbursement are an important element, they are subject to many influences. Thus, it is to be expected that aggregate reimbursements would increase over time due to an increase in the number of Medicare beneficiaries, inflation, an increase in the available of mental health services, and other factors. An increase would be expected due to "normal circumstances." For example, inpatient days for the treatment of mental disorders for discharges from short-stay hospitals increased 27 percent between 1974 and 1978, to more than 19 million days. Of these days, Medicare was the expected payment source for 3.7 million days, or 19 percent of the total days.^{5/} It would also be expected that aggregate

^{5/} Graves, E. and C. Lovato. "Utilization of Short-Stay Hospitals in the Treatment of Mental Disorders: 1974-1978," NCHS Advanced Data, Number 70, May 22, 1981.

Medicare reimbursements for health and mental health treatment would increase initially during the demonstration period due to the expanded benefits under the demonstration and the shift to cost-related reimbursement, and it would take some unknown time before the effects of the demonstration could be felt (if they are to be felt at all) relative to offsets to other reimbursements under Medicare for mental health treatment.

To address this analytical issue and questions posed above, additional data needed to be collected and analyzed on a number of variables. The first two areas are substantially answered by other sections of the impact evaluation; however, the third area, in particular, depends on data that only exist in HCFA-controlled files. These files include Medicare Provider Analysis and Review (MEDPAR) and Master Payment Record Abstract (MADRS) files. MEDPAR consists of a 20 percent sample of inpatient hospital discharges and contains detailed information on each hospital stay. MADRS contains detailed cost, charge, and length of stay, and it provides information relating to all inpatient, outpatient, and physician services billed to Medicare.

There are a number of severe limitations to the examination of offsets. First, the demonstration was not designed with the offset analysis in mind. That is, offsets were not among the original set of questions that the demonstration hoped to answer. One would have designed the MMHD quite differently if a thorough examination of offsets was of interest.

Second, the data to support the offset analysis may not totally be available. Conceptually, the universe of costs incurred by or on behalf of Medicare beneficiaries for health care may be partitioned as follows:

- . Cost Element 1--MMHD costs reimbursed by Medicare
- . Cost Element 2--MMHD costs not reimbursed by Medicare
- . Cost Element 3--Costs for other mental health care reimbursed by Medicare
- . Cost Element 4--Costs for other mental health care not reimbursed by Medicare

- . Cost Element 5--Costs for other health care reimbursed by Medicare
- . Cost Element 6--Costs for other health care not reimbursed by Medicare

The MMHD could generate data relating to cost elements 1, 2, 3, and 5. Cost elements 4 and 6 are beyond what was reasonable and feasible during the project. In addition, cost elements 3 and 5 are dependent on MEDPAR and MADRS with their attendant problems of scope and availability.

Exogenous Variables

In attempting to answer each of the specific questions in the analysis, it was necessary to account for or rule out the effects of the major exogenous factors^{6/} that were also expected to have some impact on the outcome measures. In other words, it was necessary to estimate the demonstration effects independent of the effects of other outside influences. The following list represents the major classifications of exogenous factors measured and controlled for:

- . Federal level
 - Changes in Federal laws, regulations, and policies (e.g., implementation of the ADM Block Grant)
 - Changes in revenue sources and amounts
- . State level
 - Changes in State laws, regulations, and policies, for example:
 - .. Changes in licensing or certification requirements
 - .. Changes in State confidentiality status
 - Changes in revenue sources and amounts

^{6/} Exogenous factors are defined as factors expected to influence the outcome measures that should be controlled or accounted for in the design and analysis.

. Program level

- Changes in program administration
- Changes in number of days or hours of operation
- Changes in revenue sources and amounts

Many of these factors had to be accounted for in a qualitative fashion by considering them in the interpretation of the outcome measures. By matching comparison sites within States for the CMHCs and ambulatory clinics, control for exogenous factors at the Federal and State levels was introduced into the evaluation design. Differential program level occurrences were much more difficult to deal with, however. When possible, exogenous factors were controlled for statistically if not controlled for in the evaluation design.

4. DATA COLLECTION AND PROCESSING

An important portion of every evaluation is the plan for data collection and processing. Data must be collected from a variety of sources in a systematic way. In general, for the MMHD, the HCFA Office of Direct Reimbursement (ODR) and the demonstration sites themselves were the focal points for data acquisition. But other HCFA components, the demonstration Contractor, and NIMH were also sources of information.

To address the analysis issues and questions and test the statistical hypotheses of the evaluation, data were collected on a number of variables. Exhibit 6 shows a list of these variables, partitioned by area of inquiry, i.e., patient-specific or facility-specific.

Although it is possible to group the major issues that were explored during the evaluation into several areas, for the purposes of this subsection, they should be considered in the context of information that was required to describe and analyze them.

HHS, Office of the Secretary

LIST OF VARIABLES FOR THE
EVALUATION OF THE MEDICARE
MENTAL HEALTH DEMONSTRATION

Beneficiary Variables

- . HIC No. } Record Identification Only
- . Name }
- . Address
- . Birth Date (MMDDYY)
- . Sex
- . Race
- . Marital Status
- . Residence Type
- . Entitlement (all payors)
- . Income
- . Sources of Support
- . Treatment History
- . Diagnosis
- . Referral Source
- . Services
 - Type
 - Provider
- . Charges
 - Medicare
 - Beneficiary
 - Other Payors
 - Total
- . Reimbursement
 - Medicare
 - Beneficiary
 - Others
 - Total
- . Treatment Outcome (Gross Measures)
- . Treatment Dates

Facility Variables

- . Type of Organization
- . Organization Auspices
- . License/Certification/Accreditation
- . Services
 - Modality
 - Procedures
- . Supervision Requirements
- . Client Flow
- . Record Requirements
- . QA Mechanism
- . Financing
 - Revenues
 - Expenditures
 - Unit Costs
- . Billing Policy
- . Fee Schedule
- . Sliding Fee Scale
- . Service Discounts
- . Billing Procedures
- . Collections Policy
- . Collections Procedures
- . Bad Debts
- . Staffing Pattern

The first area of consideration concerns the methodology, procedures, and practices of setting up the reimbursement scheme and rates for the demonstration sites. The primary source of data to describe these aspects of the demonstration was the Office of Direct Reimbursement. It was the function of this office to determine how much the government would pay and for how much the beneficiaries must be held liable out of their own pockets, for services provided under the demonstration.

During the early development phase of the MMHD, ODR played a major role in determining the methodology and rates of reimbursement for the mental health providers. These determinations were made for each and every provider and were an important point of negotiation between the providers and HCFA in terms of continuing cooperation in the demonstration. The activities undertaken in this process are documented in Chapter III. Changes occurring in the rates or methodology by which they were set during the course of the demonstration were also documented and their impact was factored into the analytical framework of the evaluation. Although this may seem to be primarily a qualitative task, there were many issues to be considered that needed to be supported by hard data. The ultimate decision of what rates to allow for reimbursement depended on the costs and cost structures of the providers.

The second area of consideration for evaluation concerns the impact of the Medicare waivers on client utilization of services and staff. Evaluation of this aspect of the demonstration relied on data from several sources. Again, both qualitative and quantitative issues were addressed.

The operating philosophies and procedures of the three types of mental health providers yielded a starting point for understanding service utilization. Clearly, all the sites would not make available all the same services over the entire duration of the demonstration. The types of services that were made available to Medicare beneficiaries were documented as a part of the case studies of the individual sites. Comparisons of pre-waiver to post-waiver utilization were made by each type of service provided and for reimbursable services as a whole.

The data to allow for these comparisons originated in the sites themselves. Certain of the data elements were included on the claims form that the sites forwarded to ODR for adjudication. Pre-waiver data were collected from the sites themselves by the evaluation contractor. Specifically, a procedure code for type of service was included. These codes were as follows:

- . 21--Individual Therapy
- . 22--Group Therapy
- . 23--Family Therapy
- . 24--Marital/Couple Therapy
- . 25--Medication Therapy
- . 26--Alcoholism/Substance Abuse Treatment
- . 27--Crisis Intervention or Emergency Service
- . 28--Recreation Therapy
- . 29--Expressive Arts Therapy
- . 41--Intake Interviews/Psychosocial History
- . 42--Physical Examination
- . 43--Psychiatric Exam
- . 44--Psychological Exam and Testing
- . 51--Lab Tests
- . 52--X-Rays
- . 53--Audiology
- . 54--Speech Therapy
- . 55--Occupational Therapy
- . 56--Drugs
- . 57--Other Therapeutic Ancillary Services
- . 58--Other Diagnostic Ancillary Services

At any early stage in the design of the MMHD, standards for supervision were set for the sites. Within these standards, Qualified Mental Health Providers would actually deliver or supervise the delivery of these services. Those personnel who were the deliverors of service were also specified on the claims form. They were classified by ODR in the following manner:

- . PI--Psychiatrist
- . MD--Nonpsychiatric Physician
- . PO--(QMHP) Psychologist
- . OP--Other Psychologist
- . PN--(QMHP) Psychiatric Nurse
- . ON--Other Nurse
- . PS--(QMHP) Psychiatric Social Worker
- . OS--Other Social Worker
- . CO--Counselor
- . RT--Recreation Therapist
- . AT--Expressive Arts Therapist

In terms of evaluation, one would certainly like to know if the pre-waiver population utilizing services was different with respect to common socioeconomic and demographic variables from the post-waiver population. Concomitant with this question of population is another that asks for a determination of the extent to which a new population was, in fact, served. It is entirely possible that, through the public information materials utilized to inform beneficiaries about the availability of newly covered Medicare services, or, rather, new providers, a significant demand for services may have been generated. This may very well have been a long-term effect of the demonstration. In the short term, however, the expected change was one of substituting outpatient services reimbursed on the basis of reasonable costs for fee-for-service care reimbursed on the basis of reasonable charges for those beneficiaries already receiving services by the demonstration settings.

Data that pertain to the characteristics of Medicare beneficiaries are available in numerous formats and from many sources. However, the MMHD evaluation only needed these data about the beneficiaries served by the demonstration sites. Thus, the data pertaining to age, sex, race, income, referral source, previous treatment history, etc. were generally collected as primary data from the sites. Data on utilization of pre-waiver services were also obtained from the sites, however, post-waiver utilization dates were collected from ODR billing files.

The third area of consideration in the evaluation is the cost of the MMHD to Medicare, the beneficiary, and the sites. Taking each of these "cost centers" separately, it is easy to see that several sources of data had to be tapped to develop appropriate cost analyses. For example, the direct cost to Medicare includes both the benefit cost of reimbursement for covered services and the cost of administration of the benefit as collected on the quarterly and annual cost reports. Tabulations of costs and encounters covered provided by the demonstration sites were made from data made available by ODR in its cost report files. These tabulation identified the type of providers, frequency of utilization, and cost per encounter.

Costs of services to Medicare beneficiaries are somewhat more difficult to construct. Certainly, payments that were made by beneficiaries directly to the providers were forthcoming from the collection of data in the pre-waiver period. Records of individual payments for services were accessed by the site data collection team. In cases where another payor, e.g., Medicaid, had paid for some of the services of a Medicare beneficiary, that information was also contained in the financial records of the providers. There were situations, however, in which, seemingly, no payments were made by or for beneficiaries. It is possible that coinsurance liability was forgiven. In this manner, the beneficiary was being subsidized by some other funding for services. Although this may be easy to theorize, it was not possible in practice, to trace the source of funding for the individual beneficiary in this type of situation. In the post-waiver period, the coinsurance liability is assumed to be that of the beneficiary.

Costs of services to the various settings were also an important component of the evaluation. Studies of similar types of mental health providers that have been completed in the past have lead to questions of self-sufficiency of these centers. Management questions have been raised with respect to the ability of the centers to relate actual costs of services to separable charges for the services. These factors unite to produce an ill-defined financial framework for the centers.

The very structure of the demonstration, including the use of a cost-related reimbursement scheme, forced the sites to develop cost accounting systems. The difference between costs and charges was analyzed and is presented in the impact evaluation. The data for these analyses came from the ODR cost reports as well as the ODR billing system.

The fourth area of consideration is treatment outcome. As noted earlier, the quality of care measures that were used in this evaluation were primarily gross clinical assessments of the mental health status of participating beneficiaries. These measures were collected from the facilities records. Although studies in the past have found that these data are not necessarily compiled in the clinical records, this demonstration made it a requirement of participation.

Fifth, an overall consideration is the impact of the demonstration on the sites themselves. These data were obtained while on-site and relate to administrative and programmatic changes resulting from the waivers. For example, it had been indicated that clinical recordkeeping was expected to be upgraded as a result of the waivers in order to support claims for reimbursement. There was no other way to collect such data than through on-site interviews.

In summary, HCFA-ODR, operating as fiscal intermediary, maintained a billing and reimbursement system that yielded a multitude of cost, charge, and reimbursement data. These data were linked with data collected for the evaluation from the facilities. Additionally, as part of the development phase of the project, ODR collected data from the facilities relating to:

- . General Characteristics--Type of facility, type of control, administration and services delivery personnel, and supervision
- . Treatment Cycle--Patient census, caseload, referral sources, admission criteria, catchment area definition, treatment plan, drug information, patient progress, units of service, diagnoses, discharge and follow-up, and partial hospitalization services
- . Billing--Procedure, forms, recordkeeping, patient billing, cycle, Medicare billing, and computer capability
- . Accounting And Cost Reporting Capabilities--Fiscal year, financial statements, cost reports, worker arrangements, grants, revenue sources, other services, operating cost records, and allocation

These data were supplemented by site visit data from the demonstration contractor that included a medical review and a financial review of the proposed site. These reviews were undertaken to document each site's current operating procedures and systems in five areas:

- . Medical records
- . Utilization review procedures
- . Staffing patterns
- . Claims processing
- . Cost reporting

The major purposes of these site visits were to determine the capacity and readiness of each site to successfully implement the demonstration requirements and to identify technical assistance needs. However, the data gathered during these visits, in conjunction with the ODR information cited above, was important to the production of accurate and comprehensive case studies. Both the quantity and quality of these data sets were taken into consideration in constructing the data collection instruments and procedures that are described subsequently in this chapter.

It was clear that data existed in a variety of forms and sources that related primarily or marginally to the subject evaluation. Many of the data that were required to support the analyses that were, in turn, designed to answer the questions posed previously required data collection directly from the sites. Both data abstracting and personal interviews were used to obtain the requisite information. These two procedures were highly structured and controlled to help ensure that only high quality data were forthcoming from the field. This structure required OMB clearance. The general requirements of the clearance process were considered in developing plans for field data collection. Specific materials were developed to proceed with the actual clearance process.

Issues of confidentiality were also dealt with in assembling data and information that is subject to the provisions of the Privacy Act. To comply with the Act, a Notice of a New System of Records was developed by the evaluation contractor, ASPE, and HCFA. The Notice was published in the Federal Register prior to any field data collection activities.

The direct result of consideration of the evaluation hypothesis, analysis issues, and variables was the development of data collection instruments. In considering the structure and content of the instruments, no available instruments could be found that obtain similar types of information that could be adapted to this evaluation. Two basic instruments were developed:

- . Beneficiary Clinical Record Abstracting Form
- . Program Interview Guide

The Beneficiary Clinical Record Abstracting Form contained six primary components:

- . Identifying Information--Case ID number, Macro staff completing form and data of form completion, beneficiary name and address, HIC member, and period of data collection
- . Demographic Data--Birth date, sex, race, marital status, entitlement, place of residence, payor source, income, referral source
- . Diagnosis--Primary and secondary diagnoses using specified classification systems
- . Treatment History--Previous treatment, Medicare coverage, carrier or intermediary payor, location
- . Patient Status--Ongoing case, intake during quarter, discharge during quarter, outcome, gross clinical outcome
- . Services, Charges, And Reimbursements--Service type, provider type, hours, service environment, payors, charges, reimbursements, and rejections

The Program Interview Guide contained eight primary components, the first three of which were based on abstracting data; the remainder were based on personal site interviews:

- . Identification Information--Site name and ID, interviewer ID and date, interviewee
- . General Program Information--Location, hours, licensing
- . Staffing--Personnel, title education, hours worked, experience, license, method of reimbursement, provider code, location, staff added
- . Clinical Personnel Management--Supervision of clinical staff, role of psychiatrist, quality assurance
- . Client Flow--Initial contact, intake, assessment, staffing, treatment plan development, service provision, termination, flowchart
- . Services--Basis, definition of services, charges, date of demonstration start-up

- . Public Awareness--Interagency contacts, increase in caseload
- . Administration And Management--Changes due to demonstration-clinical recordkeeping, billing, collections, accounting, computers, administrative costs

Following concurrence by both Project Officers on the suitability of the data collection forms, they were drafted into a format for pretesting. The pretest constituted a trial run of the site data collection methodology. Two ambulatory mental health settings in the Washington, D.C., area were selected for the pretest. Senior staff conducted the pretest to observe critically the site visit procedures, instrument flow, item clarity, time requirements, and other aspects of the data collection. Resource requirements for site work were carefully monitored in order to reevaluate projected data collection methods.

In the approach to the pretest, all instruments, instructions, and data-handling procedures were in a form so that the potential for severe changes arising from the pretest would be minimal.

The validation of the forms aided in determining:

- . Administrative time of each instrument of the field
- . Ease of handling each instrument in the field
- . Efficiency of the instrument layout
- . Clarity of the instructions
- . Appropriateness and adequacy of the questions
- . Availability of and access to needed data

A debriefing of the pretest team was held immediately after the pretest, and revisions of the instruments and procedures were made as required. On-site visits were made to the demonstration sites to collect needed data, while self-reported data were solicited by mail from the comparison sites.

Data processing with respect to beneficiary-specific aspects of the evaluation, required that a large volume of sensitive data be converted from raw instruments to final analytical databases. Further, some of the data needed to be categorized and coded. To accomplish this in an effective and efficient manner required:

- . A receipt control system that monitored the flow of all manual and automated processing steps and had the capability of generating upon demand aggregate statistics on the state of processing. The system had a mechanism for efficiently locating any individual instrument without delay.
- . An efficient approach to manual coding and editing, incomplete response follow-up, and machine coding and editing
- . A database design and database management system that supported complex editing and updating procedures, permitted easy database manipulation, and interfaced with complex statistical software
- . Data file structures that permitted efficient integration of analytical data from several sources in differing formats. The structures also had to lend themselves to efficient processing and storage.
- . Procedures that assured the confidentiality of data that were identifiable with an individual Medicare beneficiary. (Subsequent to linking analytical datasets, all individual identifiers were removed from the analysis files).

5. LIMITATIONS OF THE DEMONSTRATION AND EVALUATION

The demonstration and evaluation design are subject to several limitations. They include:

- . Random Selection--The Demonstration sites were not selected at random, which affects the generalizability of the Demonstration results. Although use of the comparison group and the national survey enhances generalizability, the lack of randomization may have some impact on the effects that were observable through the Demonstration
- . Beginning The Demonstration At Other Than The Start Of The Calendar Year--The Demonstration was started after the beginning of the calendar year. Because the \$750 reimbursement limit applied to the entire calendar year and because the first year of the Demonstration was less than a full calendar year, some beneficiaries may not have reached the reimbursement limit who might normally have done so during a full 12-month period. This, therefore, affected the utilization and cost elements for the first year of the Demonstration--a fact that could not be completely controlled by any statistical analysis. This limitation is heightened by the fact that the seven replacement sites--those facilities replacing ones that were originally selected but declined participation--participated for a period of five and one-half months less than other sites during the first year of the Demonstration.

Beginning The Demonstration At Different Times In Different Sites-- Some sites had the capability to fulfill the MMHD requirements; others took steps to do so. Those sites which made no early efforts to prepare themselves for the Demonstration were delayed, somewhat, in comparison to other sites in implementing the Demonstration. The implementation assessment and process components of the evaluation document this. This means that there is not total comparability in the database across sites participating in the Demonstration.

Beneficiary Population--The focus of the evaluation is on those beneficiaries who used MMHD covered services at the Demonstration sites. To develop data for use in making projections of future Medicare costs if the waivers were applied nationally, a secondary focus was on beneficiaries residing in each site's service area. Not every site participating in the Demonstration had a geographically defined service area so that a "proxy" service area boundary was constructed for such areas. Also, some sites served some clients outside of their defined service areas. This means that estimates of the proportion of the beneficiaries residing in the service areas served by Demonstration sites (estimates of consumer demand) could only be approximations for each service and not precise estimates.

Data Quantity And Quality--The ability to address all evaluation questions depends upon the quantity and quality of the data collected. While provisions were made in the evaluation to maximize data quantity and quality, there were some data gaps. Thus, some questions were not fully answerable.

The evaluation database reported on herein also has several limitations, as follows:

Incomplete baseline database

- Unidentified beneficiaries who should have been included in the database but were not. For example, many facilities did not routinely ask clients about Medicare eligibility prior to the Demonstration.
- Lack of signed beneficiary release of information forms. Hence, data were not releaseable by some facilities for some or all beneficiaries, e.g., refusals or inability to locate client.

Reliability of data

- Inconsistencies across facilities. For example, income and living arrangements data were not always available.
- Inconsistencies across records within a facility. For example, records differed in recency, completeness, and level of detail.

Validity of data

- Reliance on secondary data, i.e., discrepancies in the data item definitions between facility forms and abstracting forms. For example, a facility may have recorded income data by range of income, whereas the abstracting form sought a precise number.
- Possibility of incorrect inferences. Although the data collection and abstracting methodology was designed to be as objective as possible, certain situations required a subjective judgment on the part of the abstractor. Such judgment may have resulted in an error in measurement. For example, a congregate living arrangement such as a board and care home was common for many chronically mentally ill persons but may not have been known from simple review of clinical records because usually only an address was listed. Abstractors often noticed common addresses across beneficiaries, however, and inquired as to the type of residence. In other instances, program staff provided listings of congregate facilities. In still other instances, no feasible way existed to identify such arrangements.
- Incorrect, conflicting, or outdated information, i.e., data contained in the beneficiary clinical and financial records were inaccurate and were not reflective of a current status. For example, most demographic data in most facilities were obtained at the beneficiary's earliest intake and then not updated, so that data may have been several years old. In all such instances, abstractors reviewed the entire record in an attempt to update or reconcile early responses.

Steps were taken to establish a "good" baseline database--an effort constrained by many uncontrollable factors. Medicare beneficiaries not identified by the facilities and beneficiary records to which access was denied were constraints for which there were no remedies. In addition, the database established for the baseline period could not be adjusted for these constraints because the number of beneficiaries affected was not known. In summary, however, it is believed that the information reported on herein on Medicare beneficiaries served by Demonstration facilities is a reasonable representation of the numbers of such beneficiaries served, their characteristics, and their service patterns.

With these limitations in mind, the following is a description of the contents of the evaluation database. Several data collection instruments and sources were being utilized for the database, as follows:

| <u>Type of Information</u> | <u>Data Collection Instrument/Method</u> |
|--|--|
| <u>Identifiable Data</u> --Name, HIC number, Facility ID, Case ID | COVER SHEET/abstracted during field visits |
| <u>Demographics</u> --Earliest Intake, Most Recent Intake, Zip code, Birth date, Sex, Race, Marital Status, Referral Source, Living Arrangement, Income, Potential Payors, Diagnosis, Previous Treatment | CHARACTERISTICS (CHARs)/Abstracted during field visits |
| <u>Termination</u> --Status, Outcome, Referral, Reason | TERMINATION (TERMS)/Abstracted during field visits |
| <u>Utilization</u> --Service Date, Environment Provider, Service Type, Charges, Reimbursements | SERVICES, CHARGES, AND REIMBURSEMENTS (SCRs) Baseline data abstracted during field visits or furnished on tape by several facilities. Demonstration data derived from ODR billing taps supplemented with data abstracted during field visits. |

Using these instruments and sources, the evaluation database is comprised of:

- . 11,680 Beneficiaries are represented in the database with
cover sheet information (name, HIC, ID)
- . 11,234 Beneficiaries have characteristics data (demographics)
 - 5,933 of these beneficiaries entered treatment before
April 15, 1981
 - 5,301 of these beneficiaries entered treatment after
April 15, 1981
- . 10,741 Beneficiaries have services data (either from Macro
field visits or from ODR billing tapes)
 - 1,139 of these had services prior to April 15, 1981
only (baseline only)
 - 6,638 of these had services subsequent to April 15,
1981 only (demonstration only)
 - 2,964 of these had services in both the baseline and
demonstration periods

- . 446 Beneficiaries are not represented with characteristics data
- . 939 Beneficiaries are not represented with services data

Data were unavailable for some beneficiaries because limited data collection resources meant that some demonstration facilities could not be site-visited in the latter stages of the evaluation to abstract facility records. Such was the case with the 446 beneficiaries with missing characteristics data, all of whom entered treatment during the demonstration period. Similarly, services data for the baseline period could not be obtained on 939 beneficiaries because their records were not available for review during our site visits and there were insufficient resources available for subsequent site visits.

III. IMPLEMENTATION AND PROCESS ASSESSMENT

III. IMPLEMENTATION AND PROCESS ASSESSMENT

This chapter describes the assessment of the implementation of the MMHD and the processes that were carried out to mount it. Included in this chapter are a description of the conceptual approach to the implementation and process assessment, a description of the waivers, a discussion of the cost reimbursement methodology, details of the implementation time frame, a descriptive summary of facility changes due to the demonstration, an overview of the compliance review process and its outcome, and data relating to payments made to the facilities under the demonstration.

1. CONCEPTUAL APPROACH TO THE IMPLEMENTATION AND PROCESS ASSESSMENT

It is important to know from a policy perspective what the effects of the demonstration were, after the demonstration waivers were implemented. Yet, to answer this question, it is first necessary to know whether or not the demonstration was implemented as intended or expected.

If the evaluation of the demonstration were not to examine implementation, then policymakers would have only limited information upon which to act. Simply knowing that outcomes were favorable, unfavorable, or indifferent as a result of the waivers granted under the demonstration would not guide policymakers in subsequent actions. What would be missing is specific knowledge about the nature of the demonstration being evaluated. Implementation and process information is, therefore, critical in making certain that the MMHD policy was put into operation according to the design of the demonstration--or to test the very feasibility of the policy. Unless it is known that the demonstration operated according to its design, only limited knowledge of why particular outcomes are observed would be forthcoming.

From the perspective of the MMHD implementation assessment, there are several important events in time that should be examined:

- . Beginning reimbursement date
- . Date waivers were approved
- . Date facility met all demonstration requirements
- . Effective facility implementation date

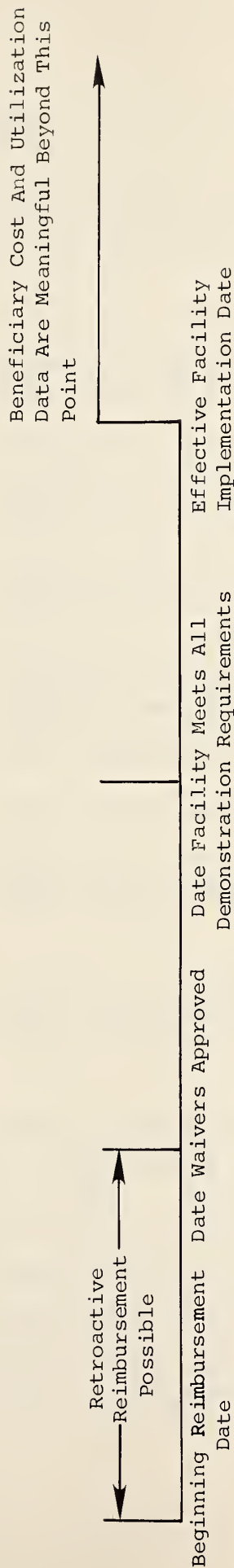
Exhibit 7 shows these events temporally and the fact that beneficiary cost and utilization data are only truly meaningful beyond the attainment of the last event. This is not to say that such data are not to be analyzed until this event occurs; particularly since the demonstration facilities in general were allowed to bill from April 15, 1981.

Overlaying this timeline perspective are three other aspects of the implementation assessment. First, the overriding interest is in the aggregate implementation experience of the facilities participating in the demonstration. However, to obtain the aggregate results it is necessary to have facility-specific information. Second, the waivers were akin to enabling legislation in that they permitted the demonstration to occur, by suspending certain statutory and regulatory provisions of Medicare Part B. The requirements of the demonstration then substitute for those waived provisions. However, there are additional requirements of the demonstration that did not relate to the waivers. The implementation assessment considers both waiver-related and nonwaiver-related requirements, although emphasizing the former. Finally, the MMHD did not have a specific requirement that all participating facilities begin reimbursement or in any other way implement the demonstration at the same time. Consequently, it was reasonable to expect that, from a time perspective, the demonstration would be implemented differentially across facilities. This means that, although the aggregate time period for the demonstration is two years, the facility-specific time frames are less. This is documented in this chapter.

EXHIBIT 7

HHS, Office of the Secretary

TIMELINE OF IMPLEMENTATION EVENTS



Beginning Reimbursement Date Scheduled start date of demonstration. Where allowable, waiver requirements were met in a given facility; claims can be submitted retroactively to this date.

Date Waiver Approved Date on which waiver package is actually approved and demonstration can begin in the field.

Date Facility Meets All Demonstration Requirements For some sites, this date will be the same as the date the waivers were approved; for others, there will be a certain period of time until the facility actually meets all requirements for providing demonstration services.

Effective Facility Implementation Date Date on which the demonstration is fully implemented in the facility and all procedures are established and operating and services are provided. For example, a given facility may fulfill all salient requirements of the demonstration but for some reason has been delayed in receiving reimbursement under the demonstration (for not filing a cost report).

2. THE WAIVERS

As noted in the previous chapter, the MMHD was designed according to a set of procedures that allowed for the following:

- . Cost-related reimbursement to the three types of facilities
- . Reduction of physician supervision requirements to allow for QMHP supervision
- . Recognition of QMHPs and other providers as direct cost centers
- . Elimination of the annual Medicare deductible requirement with respect to mental health services
- . Reduction of the Medicare coinsurance from 50 percent to the regular 20 percent
- . Elimination of the \$250 limit applied to mental health reimbursement (for one-half of the community mental health centers and ambulatory mental health clinics and all partial hospitalization facilities, and increase of the limit to \$750 for the other one-half of the centers and clinics)
- . Comprehensive reimbursement for partial hospitalization
- . Reimbursement for the therapeutic services provided to the family of the Medicare beneficiary, e.g., family therapy and couple therapy
- . Coverage of recreation and expressive arts therapy
- . Direct cost reimbursement of non-QMHP mental health professionals delivering covered services on-site, but not off-site

The procedures were implemented pursuant to the authority contained in Section 402 of the Social Security Amendments of 1967 (as amended by Section 222(b)(1) of P.L. 92-603). This Section allows the HHS Secretary to waive compliance with certain requirements of Title XVIII of the Social Security Act. These waivers permitted payments under the demonstration (1) for services otherwise not reimbursable under this Title and (2) for cost in excess of those otherwise reimbursable under this Title. The following Title XVIII waivers were considered necessary to implement the Medicare Mental Health Demonstration:

- . Section 1832(a)(2) of the Social Security Act and implementing regulations (to permit reimbursement to mental health facilities participating in the Medicare Mental Health Demonstration) for services
 - Partial hospitalization
 - Recreation and expressive arts therapy
 - Mental health services provided either by a Qualified Mental Health Professional or by others (incident to the services of a Qualified Mental Health Professional)
- . Section 1833(a)(2) of the Social Security Act and implementing regulations (the lower of cost or charges provisions)
- . Section 1861(v)(1) of the Social Security Act and implementing regulations (limits on routine services)
- . Section 1833(b) of the Social Security Act and implementing regulations (deductibles on services provided under the demonstration)
- . Section 1833(c) of the Social Security Act and implementing regulations (the limit on expenses for non-inpatient treatment of mental, psychoneurotic, and personality disorders)
- . Section 1862(a)(1) of the Social Security Act and implementing regulations (to permit health, education, and counseling of parents' families)

These waivers were approved March 20, 1981, by HCFA.

3. THE COST REIMBURSEMENT METHODOLOGY AND OPERATION

Following training sessions and the signing of agreements of participation by the sites, several preliminary steps were taken before reimbursement by Medicare was actually begun. First the site personnel responsible for billing and accounting had to become familiar with the pertinent forms and instructions. An estimated budget was prepared almost immediately, utilizing the cost-reporting forms developed by ODR. This budget was reviewed by ODR and served to set the initial rates of reimbursement for covered services. Following this initial rate-setting process, reimbursement to the sites could begin. This section describes, in general terms, the reimbursement criteria, requirements, methods, and limitations that applied during the MMHD.

Reimbursement for services provided under the terms of this demonstration was made by the Health Care Financing Administration, Bureau of Support Services, Office of Direct Reimbursement. In serving as the fiscal intermediary, ODR made all Medicare beneficiary entitlement, coverage, and reimbursement cost determinations. ODR staff developed and distributed a Provider Manual to all participating facilities. This manual contained details of the regulations and procedures that applied to the demonstration sites as summarized below.

Reimbursement for the cost of covered services rendered by the facilities participating in this demonstration was made in accordance with the Code of Federal Regulations, Title 42, Chapter IV, Part 405, Subpart D, as amended, and instructions prescribed thereunder except that Medicare requirements waived by the Secretary for this demonstration were applied for reimbursement purposes. Specifically, reimbursement for the cost of all MMHD covered services provided by each participating mental health facility was made on the basis of reasonable cost subject to retrospective adjustment. Services were covered when all of the following conditions were satisfied:

- . The patient receiving services must be enrolled in Medicare Part B.
- . The services must be provided in and by a participating facility (with certain exceptions).
- . The services must be reasonable and necessary to the diagnosis or treatment of a mental, psychoneurotic, or personality disorder.
- . The services must be prescribed on a plan of treatment.
- . The service must be an "MMHD service", i.e., it must be one of the types of services that are reimbursable under MMHD.
- . The service must be furnished by a Qualified Mental Health Professional--QMHP (as defined below and in the ODR Provider Manual) or a nonpsychiatric physician (NPP) or as an integral part and under the direct personal supervision of a QMHP or NPP.
- . The facilities meet MMHD physician supervision requirements.

Within each participating site, there were certain professional staff recognized as Qualified Mental Health Professionals who were defined by the following

standards contained in the ODR Provider Manual, in addition to any licensing requirements that may be imposed by a State:

- . Psychiatrist--A physician who has received at least three years of advanced psychiatric residency training in a program approved by the Residency Review Committee for Psychiatry and Neurology of the American Board of Psychiatry and Neurology and the American Medical Association, or who is certified in psychiatry by the American Board of Psychiatry and Neurology.
- . Psychologist--An individual licensed or certified by the State in which he/she works for the independent practice of psychology or eligible for such inclusion by virtue of having earned a doctoral degree in psychology from a regionally accredited educational institution and having two years of supervised clinical experience in health service delivery in an organized care setting, at least one of which is postdoctoral.
- . Psychiatric Social Worker--An individual possessing a master's degree from an accredited school of social work and who has at least two years of supervised experience in psychiatric social work after receiving the master's degree.
- . Psychiatric Nurse--A registered professional nurse who has a master's degree in psychiatric mental health nursing and at least two years of supervised experience.

A face-to-face encounter--a visit--between a beneficiary and a QMHP or nonpsychiatric physician was reimbursable directly. Encounters with other mental health service delivery staff of the facility, within any limitations of State law and with the express approval of ODR, incident to those of a QMHP or NPP, were also covered directly if they were:

- . Furnished as an incidental, although integral, part of the service of the QMHP or NPP
- . Of a type commonly furnished by the setting
- . Furnished under the direct personal supervision of a QMHP or NPP

The QMHP or NPP was to review the services provided by the facility's non-QMHP staff, provide supervision and guidance of the care and treatment of patients, and be available for any necessary referral of patients

and for advice and assistance in medical emergencies. Physician supervision requirements called for a physician certification of the initial treatment plan and review and recertification if major changes to the treatment plan were made subsequently.

More specifically, to be covered under the MMHD, the patient must be enrolled in the Supplementary Medical Insurance (Medicare Part B) program at the time the service was provided. Entitlement only to Hospital Insurance (Part A) benefits did not qualify a person under the MMHD. ODR verified enrollment in Medicare Part B for all claimants.

To be covered under the MMHD, services must have been both provided in and provided by a participating facility. The meanings of the terms "provided in" and "provided by" are described below.

The term "provided in" means that the site at which services were rendered must be a participating facility (i.e., one of the freestanding CMHCs, partial hospitalization facilities, or ambulatory mental health clinics). This, in turn, means that with the following three exceptions, all services must have been provided on site at a participating facility:

- . Covered drugs and biologicals that are not routinely stocked by the facilities may be obtained from a pharmacy (including a hospital pharmacy) as long as they are prescribed by a physician and dispensed on site at the participating facility or in the patient's home by either a physician or a QMHP employed by the facility.
- . Laboratory tests ordered by a participating facility but performed in an independent clinical laboratory, in a hospital laboratory, or in another laboratory outside the participating facility were covered as long as the laboratory samples were taken in the participating facility, or in the patient's home by facility employees.
- . Services that would be covered if provided at the participating facility were also covered if they were provided in the hospital or in the patient's home by either a physician or a QMHP employed by the facility. Services by audiologists; speech, occupational, recreation, and expressive arts therapists; and other mental health personnel must have been provided on site at the facility in order to be covered. Home visits by a Home Health Agency to whom a beneficiary was referred by the facility were not covered services under the MMHD.

The term "provided by" means that the services must have been provided by a participating facility. This, in turn, means that the service must have been provided either by employees of the facility or by others "under an arrangement" the facility entered into with another organization. The term "under arrangement" does not mean that the MMHD site merely served as a billing mechanism for the other party. For "under arrangement" services to be covered, the participating facility must have assumed professional responsibility for the services. The facility's professional supervision over the services required application of many of the same controls as were applied to services furnished by the facility's salaried employees. Whether services were provided at the facility or by another organization under arrangement with the facility: (1) a patient must have been accepted for treatment in accordance with stated admission policies; (2) a complete and timely clinical record on the patient that included diagnosis, medical/clinical history, QMHP's orders, and progress notes relating to all services received must have been maintained; (3) liaison with the QMHP with regard to the progress of the patient must have been maintained; (4) the plan of treatment must have been approved by a psychiatrist and periodically reviewed by the appropriate QMHP; and, (5) wherever necessary, required certifications and recertifications were obtained. Services provided "under arrangement" must have been furnished in accordance with the terms of a written contract giving the participating facility the authority needed to assure that such services were furnished in accordance with the requirements of the MMHD.

In order to be covered under the MMHD, services must have been reasonable and necessary for the diagnosis or treatment of a mental, psychoneurotic, or personality disorder. To be reasonable and necessary, the following requirements must have been met:

- . Services must have been reasonable and necessary for the diagnosis or treatment of a specific illness, injury, symptom, or complaint. Routine or preventive services such as routine physical checkups, eye refractions, or immunizations were not covered.

- . Therapeutic services must have been provided with the expectation, based on the assessment made by a physician or a QMHP of the patient's restorative potential after any needed consultation with qualified therapists, that the patient would improve significantly in a reasonable, and generally predictable, period of time or that the services were necessary to the establishment of a safe and effective maintenance program required in connection with a specific mental disorder.
- . Therapeutic services must be considered under accepted standards of clinical practice to be a specific and effective treatment for a patient's condition.

In order to be covered, all services must have been directly and specifically related to an active written plan of treatment established by a physician, by a QMHP, or by the qualified therapist providing the services. The plan of treatment must have been reviewed by a physician or QMHP and approved by a psychiatrist. The physician or the QMHP who reviewed the plan must certify that the requirements of reasonableness and necessity and active treatment in partial hospitalization settings were met. This certification should have been made at the time the plan of treatment was established or as soon thereafter as possible. Where services were continued under the same plan of treatment for a period of time, the QMHP or physician must have recertified at intervals of at least once every 30 days that there was a continuing need for such services and should have estimated for how long services would be needed. Significant changes in the treatment plan required a reapproval by the psychiatrist. The recertification should have been obtained at the time the plan of treatment was reviewed. The form of the certification and recertification and the manner of obtaining timely recertification were left up to the individual facilities; however, the professional who reviewed the plan of treatment was to sign the certification or recertification.

In addition to the requirements identified above, coverage was limited to the services described below. Services must have been provided in one of two settings, ambulatory or partial hospitalization. Many of the specific services furnished within the settings were similar or identical; therefore, the MMHD imposed similar requirements as conditions for coverage. However, there were some differences in the MMHD requirements regarding partial hospitalization service from those concerning ambulatory care.

Ambulatory services were services furnished to a patient who had not been admitted by the facility as an inpatient (i.e., with the expectation that he/she would remain overnight and occupy a bed) and who was not lodged in the facility while receiving its services. The term "ambulatory services" does not include partial hospitalization, although partial hospitalization is also a non-inpatient service. Partial hospitalization involves more extensive and intensive care provided in a more formalized setting. All ambulatory services were to have been provided both in and by either a CMHC or an AMHC.

Partial hospitalization is a planned combination of diagnostic and treatment services furnished on a non-inpatient basis to patients who require more than traditional outpatient treatment and who can be retained in the community through the use of more extensive and intensive intervention techniques. In order for the partial hospitalization service to be covered, the patient must have had a mental, psychoneurotic, or personality disorder so severe that he/she would need to be treated on an inpatient basis if partial hospitalization services were not available. Covered services may have included the following: assessment and treatment planning, crisis services, individual and group therapies, medication therapy, case management service, social training, food and nutrition services, task and skill training, and socialization activities, as well as the services described below. Partial hospitalization services were covered only (1) if the services were provided in and by either a CMHC or a partial hospitalization facility, and (2) if the patient was receiving either active treatment or diagnostic and assessment services necessary to determine whether this patient needed active care and to develop the patient's plan of treatment. To be considered "active treatment," the services must have been reasonably expected to improve the patient's condition. To assure that payment was made only under such circumstances, the plan of treatment must have included a statement that the services furnished could have reasonably been expected to improve the patient's condition. The treatment must, at a minimum, have been designed both to reduce or to control the patient's mental disorder symptoms that necessitated partial hospitalization care and to have improved the patient's level of functioning. The kind of services that met the above requirements would have included psychotherapy, medication therapy, and adjunctive

therapies such as occupational therapy, recreational therapy, and milieu therapy, if they were expected to result in improvements in the patient's condition. However, if the only activities prescribed for the patient were diversional in nature (i.e., to provide some social or recreational outlet for the patient), the care would not have been covered. Adjunctive therapies should have been provided as part of a planned program for the particular patient.

The following services were reimbursable under the MMHD if they were provided in either an ambulatory or partial hospitalization setting: (1) services provided directly by a physician or a QMHP; (2) treatment or therapeutic services that were "incident to" the services of a physician or a QMHP, and (3) diagnostic services that were "incident to" the services of a physician or QMHP.

Services performed by a QMHP that involved diagnosis, treatment, or consultation regarding a beneficiary with a mental or emotional disorder were covered MMHD services. QMHPs were to perform only those services for which they had received qualified training, those which were recognized to be within their professional domain, and those which were considered under accepted standards of clinical practice to be a specific and effective treatment for the patient's condition. Examples of QMHP covered services are:

- . Diagnostic procedures including, but not limited to:
 - Standard psychiatric interviews
 - Physical examination
 - Psychometric tests and evaluations
 - Laboratory and special tests
- . Treatment approaches including, but not limited to:
 - Psychological therapies
 - Individual psychotherapy
 - Group psychotherapy
 - Family psychotherapy
 - Behavioral therapies
 - Pharmacotherapy
 - Somatic therapies
 - Case consultation between service personnel

- . Rehabilitative services
- . Client/case centered mental health consultation to agencies providing mental health services to the Medicare beneficiary (e.g., a QMHP consults with a nurse at a nursing home about the management of a delusional patient)
- . Outreach services, i.e., home visits for purposes of diagnosis and treatment at a beneficiary's home
- . Consultation to families

Speech, occupational, recreational, and expressive arts therapies were covered if they were provided as incident to the services of a physician or QMHP. In addition, these therapies must have been of such a level of complexity and sophistication or the condition of the patient must have been such that the judgment, knowledge, and skills of a qualified therapist were required. The services must have been actually performed by or under the supervision of a qualified therapist. Drugs and biologicals furnished incident to a professional's service were covered if they met the following criteria: (1) they met the definition of "approved drugs and biologicals," (2) they were of the type that could not be self-administered, (3) they were not immunizations, and (4) drug use profiles were maintained for any patients who received drugs or biologicals.

The diagnostic tests described below, including materials and the services of technicians, were also covered if the services were furnished by or incident to a physician or QMHP, as appropriate. ("As appropriate" means that the test would normally be furnished by or supervised by this type of professional, e.g., a psychiatric social worker would not normally furnish or supervise an X-ray.)

Covered pathology services refer to services performed in regard to both clinical and anatomical pathology. Included are microbiological, serological, chemical, hematological, biophysical, cytological, immunohematological, and pathological examinations performed on material derived from the human body to provide information for the diagnosis, prevention, or treatment of a disease or assessment of a medical condition. As previously explained, laboratory specimens must have been taken at the facility or in the patient's home. The actual

analysis of samples may have been conducted at a laboratory located in the facility, in a hospital, in a local health department, or in an Approved Independent Clinical Laboratory, if the analysis was performed "under arrangement."

Covered radiology services are those in which X-rays are used for diagnostic and therapeutic purposes. Such services include, but are not limited to, the use of radioisotopes for diagnostic purposes and diagnostic tests such as angiograms, aortograms, pyelograms, myelograms, arteriograms and ventriculograms and for therapeutic services such as radium and radioactive isotope therapy. These services must have been performed on site at a participating facility in order to be covered by the MMHD. If they were provided off site, the services would have been billed to the regular Medicare carrier in the area.

Diagnostic testing performed by a qualified audiologist was covered for those beneficiaries with a mental health problem when a QMHP or physician ordered such testing for the purposes of obtaining additional information necessary to evaluate the need or the appropriate type of medical or surgical treatment for a hearing deficit or related medical problem. This service must have been performed on site at a participating facility in order to be covered by the MMHD. If they were provided off site, the services would have been billed to the regular Medicare carrier in the area.

Other diagnostic tests, such as BMRs, EKGs, EEGs, pulmonary function tests, cardiac evaluations, and allergy tests were covered when ordered by a physician or QMHP and performed on site at a participating facility. Similarly, a physician may have ordered the Illinois Test of Psycholinguistic Abilities (ITPA) or equivalent tests for individuals with language or communication disorders to be performed by a qualified speech therapist.

Some participating facilities may have provided other items or services that were not covered under the MMHD but were covered under Part B of the Medicare program. These items or services may have included:

- . Durable medical equipment
- . Ambulance services
- . Prosthetic devices
- . Leg, arm, back, and neck braces and artificial legs, arms, and eyes
- . Physical therapy
- . Services of the type described in this chapter as covered services but not related to the diagnosis or treatment of mental, psycho-neurotic, or personality disorders
- . Inpatient hospital care

Facilities may have been able to bill their local Medicare intermediary or carrier for any of these services. However, facilities could not bill local intermediaries or carriers for services covered under the MMHD.

Certain services were not covered under either the MMHD or the Medicare Program:

- . Items and services that are not reasonable and necessary for the diagnosis or treatment of illness or injury, or to improve the functioning of a malformed body member
- . Items and services that neither the beneficiary nor any other person or organization has a legal obligation to pay for or provide (e.g., services supplied free to everyone)
- . Items and services that are furnished or paid for by certain other government instrumentalities
- . Items and services that are not provided within the United States
- . Items and services that are required as a result of war occurring after the effective date of the patient's current Medicare coverage
- . Personal comfort items
- . Routine services and appliances (routine physical checkups, immunizations, eyeglasses and hearing aids, and examinations for prescribing them, except where allowed in this chapter)
- . Routine foot care and supportive devices for feet

- . Custodial care
- . Cosmetic surgery
- . Charges by immediate relatives or members of household
- . Dental services, except dental surgery or dental services allowed under the MMHD
- . Items and services paid or expected to be paid under worker's compensation
- . Transportation services (other than ambulance)
- . Drugs that can be self-administered
- . Residential care

Payments for covered mental health services furnished under the terms of this demonstration were made to each participating facility by check from the Department of the Treasury. To obtain reimbursement, all participating mental health facilities had to submit to ODR individual beneficiary bills (claim forms) for services rendered for a verification of patient entitlement and appropriate coverage of services. Failure to submit timely and accurate bills resulted in interim payments being reduced or suspended. Forms and instructions for submission of bills for covered services were supplied by the Office of Direct Reimbursement. ODR periodically authorized the release of payments and sent appropriate notification of payment to each facility.

Interim reimbursement rates were determined for covered services at each facility. For the purpose of monitoring these interim rates, each participating facility was required to complete and submit to ODR a quarterly report of the cost of rendering services under the demonstration program. The cost-reporting forms and instructions were supplied by ODR. The interim cost report covered each demonstration quarter and was to be submitted to ODR within 30 days after the end of each quarter.

For annual settlement purposes under the demonstration, each participating facility was required to complete and submit to ODR a report of the costs of

rendering services to all Medicare beneficiaries in the demonstration. The cost-reporting forms and related instructions were also supplied by ODR. The cost reports were to cover the twelve-month period coinciding with the fiscal reporting period of each participating facility and were to be submitted to ODR within 90 days following the close of each such period. The cost data submitted for final settlement purposes were to be on an accrual basis of accounting that was in accordance with generally accepted accounting principles. All facility financial books and records were to be retained for five years. Sufficient documentation must be maintained for audit and settlement purposes to support the allocation of costs.

Reimbursement on an interim basis was based on a fiscal period budget submitted by each participating facility and reviewed by ODR. The budget was subject to revision based on actual costs as reported in the quarterly and fiscal year-end cost reports. The interim payments were released by ODR monthly and the amount of interim payment was computed by allocating the budgeted costs, as adjusted, over the fiscal period.

Final reimbursement was based on the allowable cost of services rendered to the demonstration participants. Reimbursement for routine partial hospitalization services was based on the average cost per hour. Routine partial hospitalization services for purposes of this demonstration were defined as those services normally provided to all partial hospitalization participants as part of their plan of treatment. This included services for which a charge is not customarily made.

Reimbursement for ambulatory services was based on an average cost per encounter with a Qualified Mental Health Professional, a non-psychiatric physician, or another health professional.

Reimbursement for ancillary services rendered to participants was based on the cost per service received. The departmental ratio of covered charges to total charges was applied to the cost method of apportionment. Ancillary services were defined for purposes of this demonstration as direct, identifiable services

as radiology, pathology, drugs, speech, therapy, occupational therapy, recreation therapy, expressive arts therapy, and other services for which charges are customarily made in addition to partial hospitalization services charges and routine ambulatory services charges.

Reimbursement for bad debts resulting from uncollectible coinsurance from Medicare beneficiaries were subject to the provisions of Section 300 of the Provider Reimbursement Manual (HIM-15).

An allowance of a reasonable return on equity capital invested and used in the provision of patient care was allowable as an element of the reasonable cost of covered services furnished to beneficiaries by proprietary facilities. This allowance was subject to the provisions of Section 1200 of the Provider Reimbursement Manual (HIM-15).

Reimbursement for covered mental health services provided under the terms of this demonstration was subject to several limitations. The patient must have been enrolled in the Supplementary Medical Insurance Program (Medicare Part B) at the time the service was provided. The Medicare deductible (\$60 per year) was waived for purposes of this demonstration, but Medicare beneficiaries were to be billed for coinsurance at 20 percent of the allowable charge. Reimbursement for covered service was limited to 80 percent of the reimbursable cost of these services. For sites (half of the CMHCs and AMHCs) so designated, reimbursement for therapeutic mental health services, including expressive arts therapy and recreation arts therapy, was limited to \$750 per Medicare beneficiary per calendar year after the coinsurance was applied. Total allowable charges for the above services were limited to \$937.50 per Medicare beneficiary per calendar year. There was no reimbursement limit for partial hospitalization services. ODR was the primary payer for all services covered under the MMHD. Facilities were to bill ODR first for these services. Duplicate billing was not permitted; i.e., facilities may not bill other insurers for covered services provided to a Medicare beneficiary. However, if a beneficiary had other health insurance coverage (i.e., Medicaid, Blue Cross, etc.), facilities may bill other insurers for the following:

- . Services that are not covered under the MMHD. This may have included services that were covered under traditional Medicare guidelines. If so, facilities may have submitted bills to the local Medicare intermediary or carrier.
- . The 20 percent coinsurance.
- . Charges that are not reimbursable under the MMHD because the beneficiary's \$750 limit has been met.

The Secretary of the Department of Health and Human Services, through a designated representative, had the right to and did audit the books and records and related documentation supporting the cost reports submitted under the terms of the demonstration. Costs that could not be documented to the auditors' or ODR's satisfaction were disallowed for payment.

For purposes of the demonstration, each participating facility had a right to an intermediary cost report settlement hearing in accordance with the provisions of the appropriate regulations of the Health Care Financing Administration. The facility was not entitled to a Provider Reimbursement Review Board hearing.

4. THE IMPLEMENTATION TIME FRAME

The demonstration time period was originally planned for January 1, 1981, to December 31, 1982. With this time frame in mind, 45 potential demonstration facilities were selected during mid-1980 and notified by letter of their selection and the Department's interest in having them participate in the MMHD. In November 1980, these facilities were invited to a two-day orientation and training conference. Four such conferences were held as follows:

- . December 3-4, 1980--in Washington, D.C., for the partial hospitalization facilities
- . December 8-9, 1980--in Dallas, Texas, for community mental health centers and ambulatory clinics with a reimbursement limit
- . December 11-12, 1980--in Dallas, Texas, for ambulatory clinics without a reimbursement limit
- . December 15-16, 1980--in Atlanta, Georgia, for community mental health centers without a limit

The focus of each conference was on the orientation of the programs to the requirements of the demonstration, with specific training on the completion of cost reports and billing forms necessary to receive reimbursement under the demonstration.

Due, however, to delay in the approval of the waivers and a policy decision not to allow retroactive reimbursement of January 1, 1981, the demonstration time period was reestablished as April 15, 1981, to April 14, 1983. Facilities were notified by letter in latter March 1981 of this change, and their participation was formally requested.

5. FACILITY PARTICIPATION IN THE DEMONSTRATION

Participation of facilities in the demonstration was formalized by co-signature of a Memorandum of Agreement (MOA) by both the facility and the Health Care Financing Administration. The MOA delineated the requirements and responsibilities of both the facilities and the Federal government with regard to the demonstration. Facilities without an executed MOA could not participate in the demonstration.

Not all 45 facilities originally selected decided to participate in the demonstration. Of the original group of 45 facilities, the following types of facilities declined participation at specific points in time:

- . Before Training--Two community mental health centers
- . After Training--Three community mental health centers, three ambulatory mental health clinics, and two partial hospitalization programs
- . After The Start Of The Demonstration--One community mental health center, one ambulatory mental health clinic, and one partial hospitalization program

The community mental health centers declining participation before training were replaced immediately by other community mental health centers, which went through the training as scheduled. All others (except one of the ambulatory

clinics) were replaced and trained on-site by Office of Direct Reimbursement staff. The one clinic that was not replaced dropped out of the demonstration after executing an MOA. A subsequent policy decision was made not to replace this facility. Seven replacement facilities were selected using the same criteria as those used in the selection of original sites. After the start of the MMHD, three more facilities dropped out. Two of these were replacement sites, one was an original choice. None were replaced.

The 13 facilities declining participation did so for a variety of reasons. One prevalent reason stated was that participation in the demonstration would affect other funding sources. This is common in those States whose State Mental Health Agencies fund community-based programs on a "deficit financing" basis. That is, for each dollar earned through the demonstration, a facility would lose one dollar in State grant-in-aid support. Other important reasons cited included that the demonstration requirements would necessitate too many changes in the facility's operations, the facility could not feasibly meet some of the requirements, and the cost reporting and billing requirements were too complex. In addition, one partial hospitalization program dropped out after operating the demonstration for over a year because of the inability to secure the services of a QMHP.

At the end of the demonstration period, 40 facilities were participating. Fourteen were community mental health centers, twelve were ambulatory mental health clinics, and fourteen were partial hospitalization programs. The tabulations contained in this section reflect the original contingent of 45 sites; notations are made as to the specific facilities that dropped out.

Because of the relative lateness of securing the participation of the five replacement facilities, a policy decision was made that these facilities would only receive reimbursement under the demonstration from October 1, 1981, to April 14, 1983--five and one-half months less than the other facilities. Subsequent evaluation and analysis activities take into account this reduced time frame for participation.

Exhibit 8 shows the date each facility executed its MOA and the month for which each facility received its first reimbursement under the demonstration. The exhibit shows the evolutionary nature of the demonstration in that not all facilities availed themselves of the full time frame for which reimbursement was possible under the demonstration. Three community mental health centers, four ambulatory mental health clinics, and two partial hospitalization facilities--a total of nine facilities--began reimbursement under the demonstration at time frames for less than which they were eligible. Thus, for 23 percent of the facilities participating in the demonstration, the "effective" demonstration period was less than the period authorized by the waivers. This is not a surprising occurrence, for as was noted earlier, facilities were not required to implement the demonstration uniformly from a time perspective. It should be noted, however, that although a facility may have "billed" for services rendered beneficiaries under the demonstration, the facility did not receive reimbursement unless it filed the requisite cost reports correctly.

6. CHANGES REQUIRED TO ACCOMMODATE THE DEMONSTRATION

Subsequent to the start of the demonstration, numerous questions were forthcoming from the facilities. Many of these questions involved the processes of completing and filing bills and cost reports. In general, these questions were handled by the fiscal intermediary, HCFA-ODR. Technical assistance was rendered by the demonstration contractor, Executive Resource Associates, Inc., in some of these areas as well, although the thrust of their efforts involved assisting the facilities to meet other substantive requirements of the demonstration. To accommodate reality, some of the guidelines or procedures of the demonstration were refined and clarified. Several of these are of importance in viewing the entire experience of the MMHD.

First, development of a compliance review effort to monitor the facilities' compliance with MMHD requirements for QMHP staff supervision, treatment plan approval, and several other operational aspects was undertaken. Specifics of the process and content of this review were developed during the first several months of the MMHD and the demonstration contractor made site visits to facilities to ascertain their compliance. Specifics of this activity are described later

HHS, Office of the Secretary

DEMONSTRATION FACILITY IMPLEMENTATION

| <u>Facility</u> | <u>Date Facility Signed Memorandum of Agreement</u> | <u>First Month For Which Facility Received MMHD Reimbursement *</u> |
|---|---|---|
| <u>Community Mental Health Centers</u> | | |
| 01 | 3/25/81 | April |
| 02 | 3/25/81 | April |
| 03 | 4/1/81 | April |
| 04 | 3/31/81 | April |
| 05 | 3/24/81 | April |
| 06 | 3/26/81 | April |
| 07 | 4/21/81 | April |
| 08 | 3/23/81 | April |
| 09 | 4/1/81 | April |
| 10 | 3/23/81 | April |
| 11 | 6/9/81 | August |
| 12 | 5/5/81 | May |
| 13R | 7/28/81 | October |
| 14R | 7/31/81 | January 1982 |
| 15R | | No reimbursement--Dropped out |
| <u>Ambulatory Mental Health Clinics</u> | | |
| 16 | 4/30/81 | July |
| 17 | 4/27/81 | May |
| 18 | 4/13/81 | April |
| 19 | 5/8/81 | No reimbursement--Dropped out |
| 20 | 4/21/81 | July |
| 21 | 4/29/81 | July |
| 22 | 3/26/81 | No reimbursement--Dropped out |
| 23 | 3/26/81 | April |
| 24 | 3/25/81 | April |
| 25 | 4/13/81 | April |
| 26 | 3/23/81 | April |
| 27 | 4/22/81 | April |
| 28 | 4/7/81 | April |
| 29R | 8/13/81 | October--Dropped out |
| 30R | 7/23/81 | October |
| <u>Partial Hospitalization Programs</u> | | |
| 31 | 3/30/81 | April |
| 32 | 4/1/81 | April |
| 33 | 4/1/81 | April |
| 34 | 5/4/81 | June--Dropped out |
| 35 | 4/15/81 | May |
| 36 | 3/27/81 | April |
| 37 | 3/24/81 | April |
| 38 | 3/26/81 | April |
| 39 | 3/31/81 | April |
| 40 | 3/23/81 | April |
| 41 | 3/25/81 | April |
| 42 | 3/21/81 | April |
| 43 | 4/15/81 | May |
| 44R | 8/19/81 | October |
| 45R | 7/31/81 | October |

R = Replacement Site

* = Dates are 1981 unless other wise noted

in this chapter. However, the activity itself served to focus attention on the substantive requirements of the MMHD and put the facilities on notice that were not in compliance with these requirements. Subsequent site visits in the second year of the demonstration were undertaken by Executive Resource Associates, Inc., in a continuing effort to monitor compliance with the MMHD requirements.

Another area in which clarification of MMHD requirements and procedures affected the delivery of services was the allowance for billing services "ancillary to" partial hospitalization. It was determined that outpatient services, not routinely delivered to partial hospitalization clients, could be directly reimbursable under the MMHD. That is, facilities could bill for services such as individual therapy delivered to partial hospitalization clients if it was not regularly a part of the partial hospitalization regime of treatment. Subsequent analyses will discuss the impact of this decision.

A third area in which clarification of MMHD coverage guidelines affected the MMHD concerned billing for clients diagnosed with the "V-codes" of DSM III. It was decided that clients with only these diagnoses would not be covered under the MMHD unless a valid mental health diagnosis was also given.

A fourth area of project administrative activity that had a material affect on reimbursements under the MMHD was the setting of "reasonable cost" limits. Subsequent to analysis of the early cost reports filed by the facilities, statewide limits on the cost per encounter that would be used to calculate reimbursements were developed and put into place by HCFA-ODR. These limits were based on the "area prevailing charges" for one hour of psychotherapy in effect in the various States containing MMHD facilities, adjusted for inflation and other factors. Exhibit 9 lists these limits by State. Subsequent to the setting of these limits, each facility was contacted in May 1982 and told that the statewide limit would be applied in the determination of reimbursable costs for which Medicare would be responsible. In several cases, these "reasonable cost" limits were less than the reported costs for the facility. Analysis of the impact of this administrative determination is contained in a subsequent chapter.

EXHIBIT 9

HHS, Office of the Secretary

REASONABLE COST GUIDELINES FOR QMHP
PROFESSIONAL SERVICES

| <u>State</u> | <u>Reasonable Cost Limit</u> |
|---------------|----------------------------------|
| Arizona | \$112 |
| Arkansas | 100 |
| California | 140 |
| Connecticut | 107 |
| Florida | 123 |
| Georgia | 110 |
| Illinois | 100 |
| Maine | 160 |
| Massachusetts | 93 |
| Michigan | 98 |
| Minnesota | 110 |
| Missouri | 120 |
| Nebraska | 120 |
| New Jersey | 100 |
| New York | 128 |
| Ohio | 86 |
| Pennsylvania | 70 |
| Tennessee | 62 |
| Utah | 100 |
| Vermont | 90 |
| Virginia | 92 |
| Washington | 98 |
| Wisconsin | 107 |

Numerous changes in the existing policies, procedures, and characteristics of the demonstration facilities took place to comply with the requirements of the MMHD or in response to the incentives and disincentives embedded therein. These changes are described in detail in Chapter IV and summarized below.

These changes are described in the seven areas delineated on the "Demonstration Site Program Interview Guide" as follows: program characteristics, staffing, clinical personnel management, client flow, services, administration and management, and public awareness.

In general, program characteristics did not change as a result of the MMHD. Only a few facilities indicated that major new programs or new services were put into place.

Several facets of the MMHD had a noticeable and significant impact on the staffing patterns and personnel management practices of the facilities. First, virtually all facilities indicated that staff responsibilities had increased either as a result of the QMHP supervision and treatment plan development requirement or due to a general increase in clinical records management with its attendant quality assurance activities. For many facilities, this necessitated hiring QMHPs or shifting staff. Second, another major change attributed to the MMHD was the increase of psychiatrists' time for review of treatment plans and on-site visits. Third, the administrative and management staff of many facilities was increased to deal with the billing and cost reporting aspects of the MMHD. Finally, the restriction to indirect reimbursement for non-QMHP delivered services off-site caused many of the facilities to utilize QMHPs off-site for visits previously made by non-QMHPs.

In general, the flow of clients through the facilities was not significantly affected by the demonstration. It is clear, however, that staff responsibilities as they relate to the flow of clients did change. The cited impacts of psychiatrist and other QMHP involvement in treatment plan development, review, and approval added steps that relate indirectly to the flow of clients. The criteria and processes of that flow, though, do not seem to have changed.

The array of services available to Medicare beneficiaries, in general, prior to the MMHD was quite similar to that available during the demonstration. However, in several facilities, services not previously provided were offered during the MMHD.

In terms of overall administration and management responses to the requirements of the MMHD, two areas clearly surfaced as having changed. Many facilities indicated that clinical records (treatment plans, progress notes, drug profiles, and discharge summaries) were either expanded or added. The development and preparation of bills and cost reports and policies and procedures for billing and collections were also cited as a major area of change. Many facilities had not billed clients in the past or were charging fees substantially reduced by sliding fee scales. The MMHD requirements for coinsurance billing were a major new element of the accounting and billing system of the facilities. In general, changes to clinical recordkeeping and the preparation of cost reports and bills were by far the two most significant aspects of the demonstration from the point of view of overall program administration and management. Many of the elements that comprise these two systems of recording and reporting were either not formally in place in some facilities or nonessential to them and hence nonexistent. The demonstration played a major role as a change agent in the development of these two operational aspects of the facilities.

The facilities utilized a variety of means to make the public aware of their participation in the MMHD ranging from informal notification of referral sources to mass mailings of specifically developed promotional materials to radio advertising spots. Many of these activities necessitated changes in either existing literature or methods by which the information reached the public.

7. BILLING AND REIMBURSEMENT

Reporting on the billing experience of the MMHD involves several questions:

1. How many facilities submitted bills under the MMHD?

Forty-one facilities submitted bills; however, one of these facilities eventually dropped out. Thus, 40 facilities billed for services under the demonstration.

2. What was the distribution of earliest billing date for the MMHD facilities?

As shown in Exhibit 10, the date of earliest billing ranged from May 1981 to September 1982. A distribution of these first billing dates is shown in Exhibit 11. Although neither exhibit takes into account the fact that seven of the facilities that were replacement sites could not bill before October 1981, it does show that many facilities were able to bill within several months of the start of the project.

3. What is the earliest date of service billed by the facilities?

Exhibit 10 also shows the earliest date of service billed by each facility. Twenty-seven facilities billed back to the start of the project in April 1981. Four facilities billed back to May 1981. One facility billed back to June 1981. Three facilities billed back to July 1981. One facility billed back to August 1981. One facility billed back to October 1981. One replacement site billed from January 1982. Thus, of the original contingent of 36 facilities allowed to bill from April 1981, only 27 did so.

4. How many claims were submitted by the demonstration facilities?

Exhibit 10 indicates that almost 74,000 claims, many of which were for multiple services, were submitted by the facilities (through June 1984). This is a compilation of all claims submitted and includes claims that were subsequently adjudicated positively, denied, rejected, or otherwise found unacceptable. From the exhibit, one can see that the CMHCs, as a group, accounted for 55 percent of the billing activity; the AMHCs accounted for 31 percent of the billing activity; and the PHPs accounted for the remaining 14 percent. Exhibit 12 displays the number of bills submitted by each facility by the month in which they were received at HCFA-ODR. As noted, these data are summarized in Exhibit 10.

Returning to the area of reimbursement methodology, the MMHD required significant changes for many of the facilities. Few of the MMHD participants had ever operated within a cost-related reimbursement environment. Most were familiar with charge-based systems, although several had neither billed clients nor third-party payors in the past. For many, the experience of preparing the required quarterly and annual cost reports was difficult indeed. As noted earlier, a prevalent reason stated by facilities for either not participating or dropping out was the overwhelming job of cost accounting they felt would be required. However, the majority of facilities adhered to the requirements for

EXHIBIT 10

HHS, Office of the Secretary

FACILITY BILLING STATUS

| <u>Facility</u> | <u>Date of Earliest Billing</u> | <u>Earliest Date of Service Billed</u> | <u>Number of Bills Submitted</u> |
|-----------------|---|--|--|
| <u>CMHCs</u> | | | |
| 01 | 9/1/81 | 4/81 | 2,404 |
| 02 | 7/6/81 | 4/81 | 3,540 |
| 03 | 7/20/81 | 4/81 | 1,251 |
| 04 | 9/28/81 | 4/81 | 1,569 |
| 05 | 6/29/81 | 4/81 | 3,260 |
| 06 | 8/10/81 | 4/81 | 2,696 |
| 07 | 7/20/81 | 4/81 | 3,924 |
| 08 | 7/10/81 | 4/81 | 795 |
| 09 | 6/25/81 | 4/81 | 9,940 |
| 10 | 8/17/81 | 4/81 | 574 |
| 11 | 10/19/81 | 8/81 | 3,962 |
| 12 | 12/21/81 | 5/81 | 4,228 |
| 13 | 4/14/82 | 10/81 | 1,166 |
| 14 | 9/27/82 | 1/82 | 1,485 |
| 15 | -- | -- | -- |
| CMHC TOTAL | | | 40,794 |
| <u>AMHCs</u> | | | |
| 16 | 11/10/81 | 7/81 | 768 |
| 17 | 1/11/82 | 5/81 | 1,648 |
| 18 | 8/12/81 | 4/81 | 2,646 |
| 19 | -- | -- | -- |
| 20 | 8/10/81 | 7/81 | 566 |
| 21 | 3/1/82 | 7/81 | 822 |
| 22 | -- | -- | -- |
| 23 | 7/28/81 | 4/81 | 2,134 |
| 24 | 7/9/81 | 4/81 | 969 |
| 25 | 7/31/81 | 4/81 | 2,039 |
| 26 | 5/11/81 | 4/81 | 4,382 |
| 27 | 9/1/81 | 4/81 | 5,377 |
| 28 | 8/4/81 | 4/81 | 988 |
| 29 | -- | -- | -- |
| 30 | 11/19/81 | 10/81 | 678 |
| AMHC TOTAL | | | 23,017 |
| <u>PHPs</u> | | | |
| 31 | 6/26/81 | 4/81 | 2,202 |
| 32 | 1/15/82 | 4/81 | 145 |
| 33 | 8/25/81 | 4/81 | 807 |
| 34 | 8/10/81 | 6/81 | 219 |
| 35 | 7/31/81 | 5/81 | 259 |
| 36 | 7/13/81 | 4/81 | 951 |
| 37 | 8/18/81 | 4/81 | 548 |
| 38 | 6/8/81 | 4/81 | 947 |
| 39 | 8/12/81 | 4/81 | 497 |
| 40 | 5/29/81 | 4/81 | 848 |
| 41 | 5/22/81 | 4/81 | 411 |
| 42 | 7/13/81 | 4/81 | 610 |
| 43 | 11/16/81 | 5/81 | 412 |
| 44 | 3/24/82 | 10/81 | 804 |
| 45 | 3/29/82 | 10/81 | 344 |
| PHP TOTAL | | | 10,004 |
| GRAND TOTAL | | | 73,815 |

HHS, Office of the Secretary

DISTRIBUTION OF FIRST BILLING BY DATES

| | <u>Number of Facilities Billing for the First Time</u> | <u>Percent Billing for the First Time</u> | <u>Cumulative Percent Billing for the First Time*</u> |
|-------|--|---|---|
| 4/81 | 0 | 0.0% | 0.0% |
| 5/81 | 3 | 7.3 | 7.3 |
| 6/81 | 4 | 9.8 | 17.1 |
| 7/81 | 10 | 24.4 | 41.5 |
| 8/81 | 9 | 22.0 | 63.5 |
| 9/81 | 3 | 7.3 | 70.8 |
| 10/81 | 1 | 2.4 | 73.2 |
| 11/81 | 3 | 7.3 | 80.5 |
| 12/81 | 1 | 2.4 | 82.9 |
| 1/82 | 2 | 4.9 | 87.8 |
| 2/82 | 0 | 0.0 | 87.8 |
| 3/82 | 3 | 7.3 | 95.1 |
| 4/82 | 1 | 2.4 | 97.5 |
| 5/82 | 0 | 0.0 | 97.5 |
| 6/82 | 0 | 0.0 | 97.5 |
| 7/82 | 0 | 0.0 | 97.5 |
| 8/82 | 0 | 0.0 | 97.5 |
| 9/82 | 1 | 2.4 | 99.9 |

* Column does not add to 100 percent due to round-off error.

EXHIBIT 12(1)

HHS, Office of the Secretary

NUMBER OF BILLS SUBMITTED TO ODR
BY MONTH BY FACILITY

| Facility | QUARTER 1 | | | QUARTER 2 | | | QUARTER 3 | | | QUARTER 4 | | |
|--------------|-----------|------|------|-----------|-------|-------|-----------|-------|-------|-----------|-------|-------|
| | 4/81 | 5/81 | 6/81 | 7/81 | 8/81 | 9/81 | 10/81 | 11/81 | 12/81 | 1/82 | 2/82 | 3/82 |
| <u>CMHCs</u> | | | | | | | | | | | | |
| 01 | | | | | | 154 | 87 | 106 | 105 | 93 | 114 | 121 |
| 02 | | | | 146 | 102 | 118 | 112 | 125 | 157 | 142 | 106 | 146 |
| 03 | | | | 86 | 30 | 24 | 49 | 85 | 39 | 46 | 45 | 39 |
| 04 | | | | | | 80 | | 27 | 119 | | 78 | 41 |
| 05 | | | 273 | 197 | 200 | 150 | 150 | | 314 | | 216 | 63 |
| 06 | | | | | 104 | | 261 | 96 | 212 | 110 | | 209 |
| 07 | | | | 144 | 161 | 249 | 65 | 128 | 191 | 116 | 77 | 298 |
| 08 | | | | 59 | | | | 56 | | | 118 | |
| 09 | | | 120 | 782 | 410 | 374 | 397 | 399 | | 529 | 170 | 420 |
| 10 | | | | | 29 | | | 30 | 28 | | | |
| 11 | | | | | | | 237 | 181 | 55 | 155 | 160 | 350 |
| 12 | | | | | | | | | 185 | 24 | 18 | 191 |
| 13 | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | |
| CMHC TOTAL | 0 | 0 | 393 | 1,414 | 1,036 | 1,149 | 1,358 | 1,233 | 1,405 | 1,215 | 1,102 | 1,878 |
| <u>AMHCs</u> | | | | | | | | | | | | |
| 16 | | | | | | | | 87 | 29 | | | 24 |
| 17 | | | | | | | | | | 411 | 60 | 184 |
| 18 | | | | | 52 | 119 | | 159 | | | 163 | 125 |
| 19 | | | | | | | | | | | | |
| 20 | | | | | 3 | 12 | 17 | 20 | 16 | 20 | | 37 |
| 21 | | | | | | | | | | | | 25 |
| 22 | | | | | | | | | | | | |
| 23 | | | | 60 | 40 | 36 | 38 | 25 | 59 | 52 | 59 | 73 |
| 24 | | | | 17 | 40 | 4 | 73 | | 76 | | 92 | |
| 25 | | | | 75 | 63 | 70 | 88 | | 90 | 141 | 77 | |
| 26 | | 74 | 153 | 183 | 182 | 178 | 199 | 159 | 222 | 218 | 251 | 234 |
| 27 | | | | | | 360 | 457 | 207 | 116 | 175 | 216 | 195 |
| 28 | | | | | 59 | | 43 | 54 | | 90 | 3 | |
| 29 | | | | | | | | | | | | |
| 30 | | | | | | | | 24 | 28 | 42 | 43 | 25 |
| AMHC TOTAL | 0 | 74 | 153 | 335 | 439 | 779 | 915 | 735 | 636 | 1,149 | 964 | 922 |
| <u>PHPs</u> | | | | | | | | | | | | |
| 31 | | | 111 | 64 | 68 | 63 | 71 | 69 | 99 | 126 | 101 | 117 |
| 32 | | | | | | | | | | 74 | | 13 |
| 33 | | | | | 107 | 28 | 27 | 47 | 31 | 30 | 29 | 30 |
| 34 | | | | | 39 | 20 | 18 | 20 | 17 | 19 | 37 | 18 |
| 35 | | | | 25 | 8 | 8 | | | | | | |
| 36 | | | | 38 | 78 | 37 | 40 | 40 | | | 69 | 36 |
| 37 | | | | | 15 | | | 20 | 16 | 35 | | 20 |
| 38 | | | 25 | 53 | 23 | 24 | 61 | 103 | 44 | 41 | 38 | 35 |
| 39 | | | | | 36 | 19 | 20 | 19 | 20 | 21 | 24 | 22 |
| 40 | | 6 | 15 | 24 | 14 | 6 | 34 | 23 | 27 | 21 | | 22 |
| 41 | | 17 | 19 | 22 | 19 | 18 | 19 | 20 | 20 | 20 | 19 | 20 |
| 42 | | | | 12 | 12 | 42 | 20 | 23 | | | 25 | |
| 43 | | | | | | | | 92 | | 20 | 37 | 18 |
| 44 | | | | | | | | | | | | 157 |
| 45 | | | | | | | | | | | | 5 |
| PHP TOTAL | 0 | 23 | 170 | 238 | 419 | 265 | 310 | 476 | 274 | 407 | 379 | 513 |
| GRAND TOTAL | 0 | 97 | 716 | 1,987 | 1,894 | 2,193 | 2,583 | 2,444 | 2,315 | 2,771 | 2,445 | 3,313 |

| Facility | QUARTER 5 | | | QUARTER 6 | | | QUARTER 7 | | | QUARTER 8 | | |
|--------------|-----------|-------|-------|-----------|-------|-------|-----------|-------|-------|-----------|-------|-------|
| | 4/82 | 5/82 | 6/82 | 7/82 | 8/82 | 9/82 | 10/82 | 11/82 | 12/82 | 1/83 | 2/83 | 3/83 |
| <u>CMHCs</u> | | | | | | | | | | | | |
| 01 | 107 | 142 | 52 | | 165 | 111 | 95 | | | 175 | 373 | |
| 02 | | 197 | | 10 | 147 | 7 | 142 | 399 | 139 | 249 | 173 | 299 |
| 03 | | 84 | | 34 | | 92 | | | 235 | | 113 | 22 |
| 04 | 150 | 67 | 52 | 36 | 75 | 64 | | 123 | | | 236 | 5 |
| 05 | 129 | 154 | | 55 | 323 | | 149 | | 190 | 278 | | 95 |
| 06 | 124 | | 245 | | | 110 | | 386 | 194 | 106 | 135 | 123 |
| 07 | 195 | 164 | 178 | 145 | 233 | 60 | 150 | 175 | 158 | 336 | 164 | 86 |
| 08 | 23 | | | 26 | | 182 | 89 | | | | 136 | 55 |
| 09 | 475 | 469 | 1 | 491 | 468 | 800 | 342 | 354 | | 476 | 472 | 730 |
| 10 | 27 | | 52 | | 39 | | 94 | | 53 | 76 | | 74 |
| 11 | 200 | 198 | 196 | 207 | 237 | 35 | 353 | 206 | 33 | 191 | 208 | 203 |
| 12 | 116 | 233 | 381 | 167 | 44 | 702 | | | 357 | 404 | 256 | 199 |
| 13 | 125 | | | 205 | | | 143 | 45 | 52 | | 92 | 95 |
| 14 | | | | | | 30 | 25 | 28 | 24 | 149 | 72 | 114 |
| 15 | | | | | | | | | | | | |
| CMHC TOTAL | 1,671 | 1,708 | 1,157 | 1,376 | 1,731 | 2,193 | 1,582 | 1,716 | 1,435 | 2,440 | 2,430 | 2,100 |
| <u>AMHCs</u> | | | | | | | | | | | | |
| 16 | | 51 | 1 | 47 | | | | 87 | 29 | | | 24 |
| 17 | 14 | 4 | | 135 | 80 | | | | 234 | | | |
| 18 | 123 | | 132 | | 297 | 146 | 149 | | | 333 | 188 | 174 |
| 19 | | | | | | | | | | | | |
| 20 | | 21 | 21 | | 44 | 39 | | 56 | 44 | 48 | | 70 |
| 21 | 40 | 133 | | 118 | | | 129 | | | 154 | 2 | |
| 22 | | | | | | | | | | | | |
| 23 | 92 | 108 | 110 | 127 | 107 | 115 | | 255 | 122 | 134 | | 122 |
| 24 | 25 | 81 | 73 | | 54 | 81 | 48 | 46 | 41 | 41 | 45 | |
| 25 | 205 | | 212 | | 221 | | 123 | 110 | 104 | 162 | | 147 |
| 26 | 256 | | 250 | | 491 | | | 294 | | | 134 | 400 |
| 27 | 317 | 190 | 137 | 364 | 169 | | 202 | 320 | 366 | | 77 | 97 |
| 28 | 92 | | | 135 | | | 133 | | | 69 | 114 | |
| 29 | | | | | | | | | | | | |
| 30 | 53 | 54 | | 110 | | 59 | | 72 | | 60 | | 58 |
| AMHC TOTAL | 1,217 | 642 | 936 | 1,036 | 1,463 | 440 | 784 | 1,240 | 940 | 1,001 | 560 | 1,092 |
| <u>PHPs</u> | | | | | | | | | | | | |
| 31 | 100 | 129 | 107 | 96 | 97 | 92 | 83 | 92 | | 171 | 93 | 90 |
| 32 | 7 | | 6 | 6 | 7 | 5 | | | 3 | | | 10 |
| 33 | 30 | 28 | 28 | 33 | 36 | 38 | 34 | 43 | 37 | 35 | 35 | 39 |
| 34 | 17 | 14 | | | | | | | | | | |
| 35 | | 61 | | | | | | | | | | 107 |
| 36 | 36 | 65 | 40 | 39 | 42 | 43 | 39 | 39 | 42 | 43 | 44 | 45 |
| 37 | 48 | 61 | 28 | | 51 | 25 | | 59 | 26 | | | 51 |
| 38 | 33 | 41 | 40 | 37 | 32 | 37 | 37 | 32 | 32 | 36 | 38 | 37 |
| 39 | 23 | 22 | 21 | 20 | 20 | 20 | 22 | 21 | 23 | 20 | 23 | 22 |
| 40 | 19 | 56 | 31 | | | 66 | | 130 | | 60 | | 58 |
| 41 | 20 | | 16 | 15 | 17 | 15 | 15 | 14 | 13 | 15 | 15 | 15 |
| 42 | 28 | 27 | 32 | 28 | 29 | 26 | 28 | 26 | 25 | 92 | 26 | 38 |
| 43 | 18 | 18 | 19 | 19 | 17 | 16 | 16 | 18 | 18 | 18 | 18 | 18 |
| 44 | 37 | 40 | 38 | 40 | 84 | 48 | 45 | 49 | 48 | 47 | 42 | 43 |
| 45 | 58 | 32 | 20 | | 35 | 20 | 28 | 31 | 18 | 17 | 17 | 19 |
| PHP TOTAL | 474 | 594 | 426 | 333 | 467 | 451 | 347 | 554 | 290 | 554 | 351 | 592 |
| GRAND TOTAL | 3,362 | 2,944 | 2,519 | 2,745 | 3,661 | 3,084 | 2,713 | 3,510 | 2,665 | 3,995 | 3,341 | 3,784 |

| | QUARTER 9 | | | QUARTER 10 | | | QUARTER 11 | | Total Number of Bills Submitted |
|--------------|-----------|-------|-------|------------|------|------|------------|-------|--|
| Facility | 4/83 | 5/83 | 6/83 | 7/83 | 8/83 | 9/83 | 10/83 | 11/83 | |
| <u>CMHCs</u> | | | | | | | | | |
| 01 | 159 | 118 | 127 | | | | | | 2,404 |
| 02 | 496 | 103 | 12 | 2 | 11 | | | | 3,540 |
| 03 | | 129 | 98 | 1 | | | | | 1,251 |
| 04 | | 146 | 261 | | | | 9 | | 1,569 |
| 05 | 88 | 205 | 27 | 1 | 3 | | | | 3,260 |
| 06 | 139 | 132 | | | 10 | | | | 2,696 |
| 07 | 157 | 144 | 141 | 4 | 5 | | | | 3,924 |
| 08 | 1 | 50 | | | | | | | 795 |
| 09 | 840 | 387 | 23 | 1 | 4 | 6 | | | 9,940 |
| 10 | 7 | | 63 | | | 2 | | | 574 |
| 11 | 192 | 202 | 159 | 2 | 1 | 1 | | | 3,962 |
| 12 | 381 | 548 | 3 | 4 | 1 | | 14 | | 4,228 |
| 13 | 122 | 268 | | | | | 15 | 4 | 1,166 |
| 14 | 350 | | 113 | 85 | 477 | | 18 | | 1,485 |
| 15 | | | | | | | | | -- |
| CMHC TOTAL | 2,932 | 2,432 | 1,027 | 100 | 512 | 18 | 47 | 4 | 40,794 |
| <u>AMHCs</u> | | | | | | | | | |
| 16 | | 330 | 1 | 47 | | 11 | | | 768 |
| 17 | | 230 | 277 | | 13 | | 6 | | 1,648 |
| 18 | 177 | 168 | 112 | | 29 | | | | 2,646 |
| 19 | | | | | | | | | -- |
| 20 | | 65 | | | | 33 | | | 566 |
| 21 | 109 | 106 | 3 | | | 3 | | | 822 |
| 22 | | | | | | | | | -- |
| 23 | 174 | 222 | | | 4 | | | | 2,134 |
| 24 | 94 | 31 | | 7 | | | | | 969 |
| 25 | | 146 | | | 5 | | | | 2,039 |
| 26 | 31 | 294 | 137 | | 4 | 38 | | | 4,382 |
| 27 | 84 | 391 | 282 | 340 | 315 | | | | 5,377 |
| 28 | 149 | 47 | | | | | | | 988 |
| 29 | | | | | | | | | -- |
| 30 | 50 | | | | | | | | 678 |
| AMHC TOTAL | 868 | 2,030 | 812 | 394 | 370 | 85 | 6 | 0 | 23,017 |
| <u>PHPs</u> | | | | | | | | | |
| 31 | 158 | 5 | | | | | | | 2,202 |
| 32 | | | 9 | | | | | | 145 |
| 33 | 60 | | 1 | 1 | | | | | 807 |
| 34 | | | | | | | | | 219 |
| 35 | | | 50 | | | | | | 259 |
| 36 | | 93 | | 3 | | | | | 951 |
| 37 | 29 | 63 | 1 | | | | | | 548 |
| 38 | 36 | | 32 | | | | | | 947 |
| 39 | 22 | 28 | 6 | 1 | | 2 | | | 497 |
| 40 | 54 | 169 | 7 | | 6 | | | | 848 |
| 41 | 14 | 14 | | | | | | | 411 |
| 42 | 24 | 41 | 6 | | | | | | 610 |
| 43 | 32 | | | | | | | | 412 |
| 44 | | 86 | | | | | | | 804 |
| 45 | 19 | 22 | 2 | 1 | | | | | 344 |
| PHP TOTAL | 448 | 521 | 114 | 6 | 6 | 2 | 0 | 0 | 10,004 |
| GRAND TOTAL | 4,248 | 4,983 | 1,953 | 500 | 888 | 105 | 53 | 4 | 73,815 |

the cost reports within reasonable time limits although the extension of time limits for filing was a prevalent occurrence.

Reimbursement on an interim basis (called PIP--Periodic Interim Payment) was based on a quarterly fiscal period report submitted by each participating facility and reviewed by ODR. Then PIPs were calculated and made, subject to adjustment, over the next fiscal period. Exhibits 13, 14, and 15 are based on data that are a combination of PIPs and adjustments and are a combination of accrual and cost accounting practices. They are only an approximation of the actual dates of payment to each facility. In reviewing these data, the reader is cautioned that these payments are based on unaudited costs.

Exhibit 13 shows the outlays by type of facility and month. Exhibit 14 is a pie chart showing the share of benefit dollars paid to each group of facilities. Exhibit 15 graphs cumulative payments to all sites.

Overall, some \$10,840,697 was paid out under the demonstration, of which \$6,008,668 (55 percent) was to CMHCs, \$2,274,074 (21 percent) was to AMHCs, and \$2,557,955 (24 percent) was to PHPs. For the first full year of the MMHD (April 15, 1981, to April 14, 1982), \$4,687,482 (43 percent of the total) was paid to the facilities. The remaining \$6,153,215 (57 percent of the total) was paid during the second year. The average total outlay for participating facilities over the two-year demonstration was as follows:

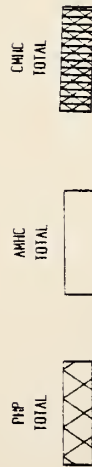
- . All Facilities--\$285,282 (\$142,641 per year)
- . CMHCs--\$462,205 (\$231,103 per year)
- . AMHCs--\$189,506 (\$94,753 per year)
- . PHPs--\$196,766 (\$98,383 per year)

This is based on complete or partial final audited cost reports for 38 of the 40 demonstration facilities.

EXHIBIT 13

HHS, Office of the Secretary

PIPs AND ADJUSTMENT PAYMENTS TO
MMHD FACILITIES BY MONTH



BASED ON UNAUDITED COSTS

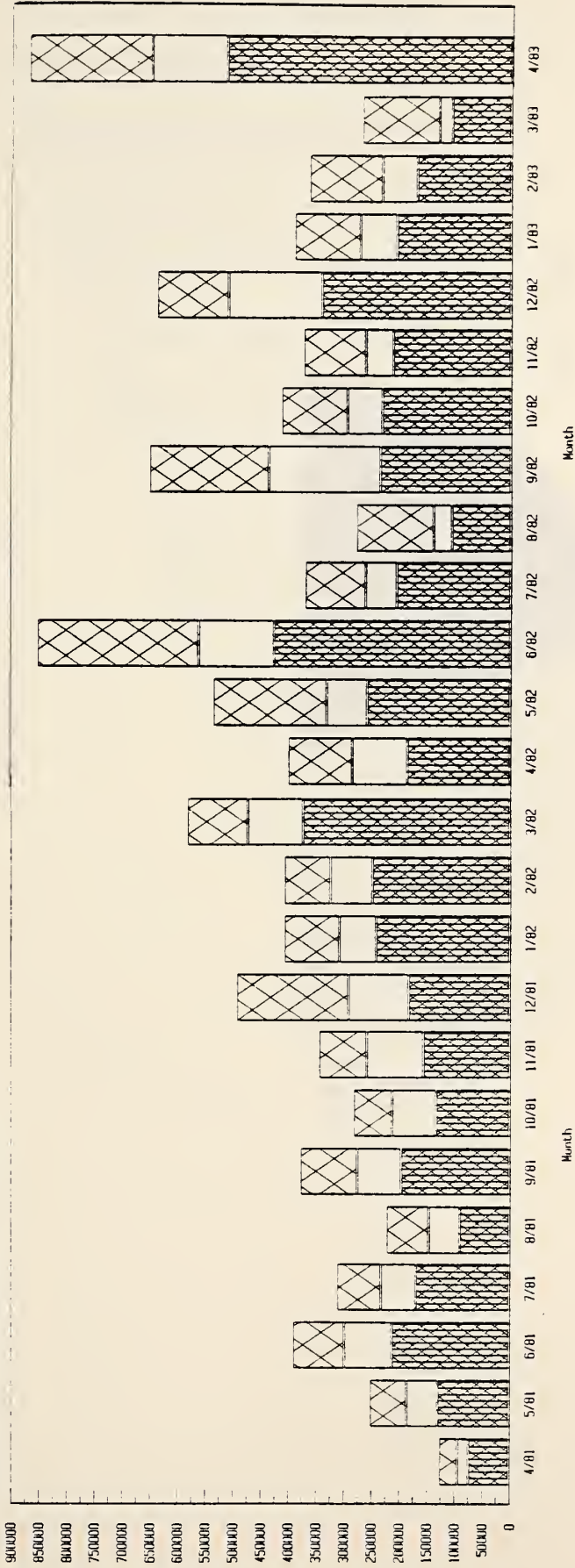
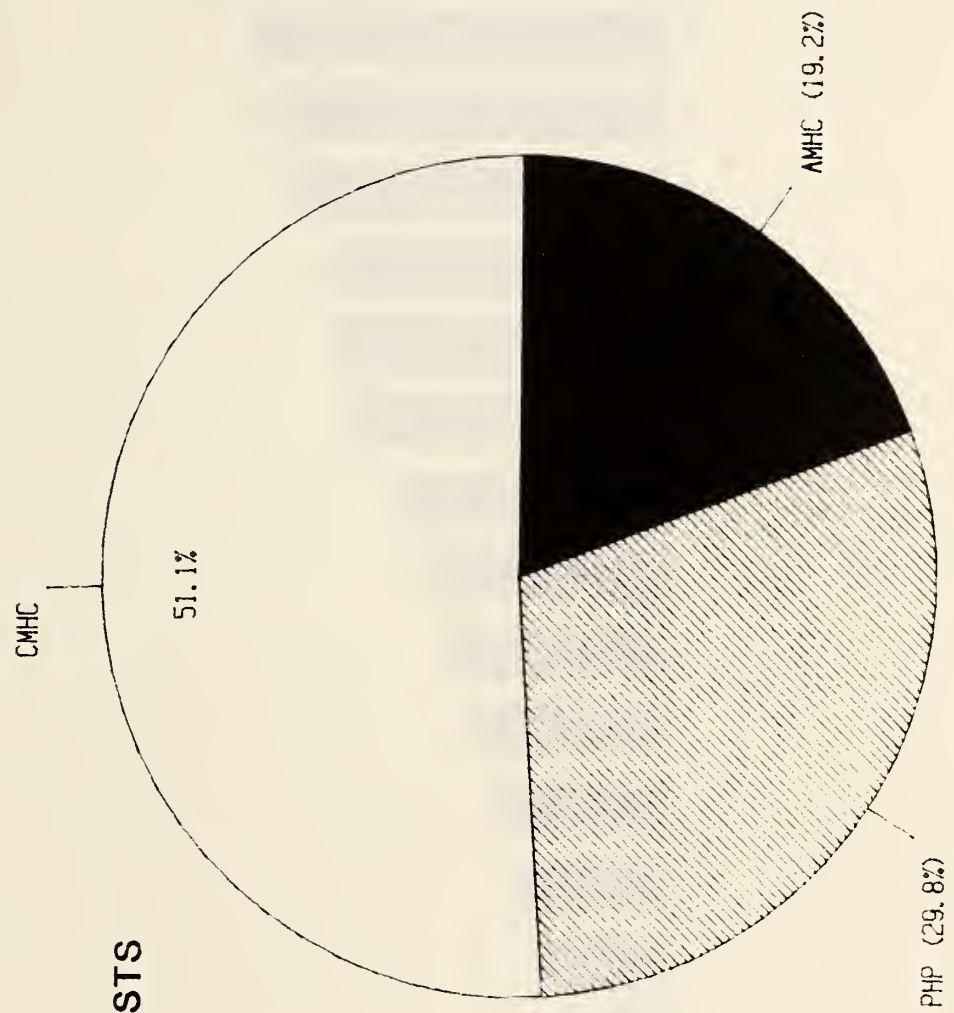


EXHIBIT 14

HHS, Office of the Secretary

TOTAL DEMONSTRATION PAYMENTS
BY FACILITY TYPE

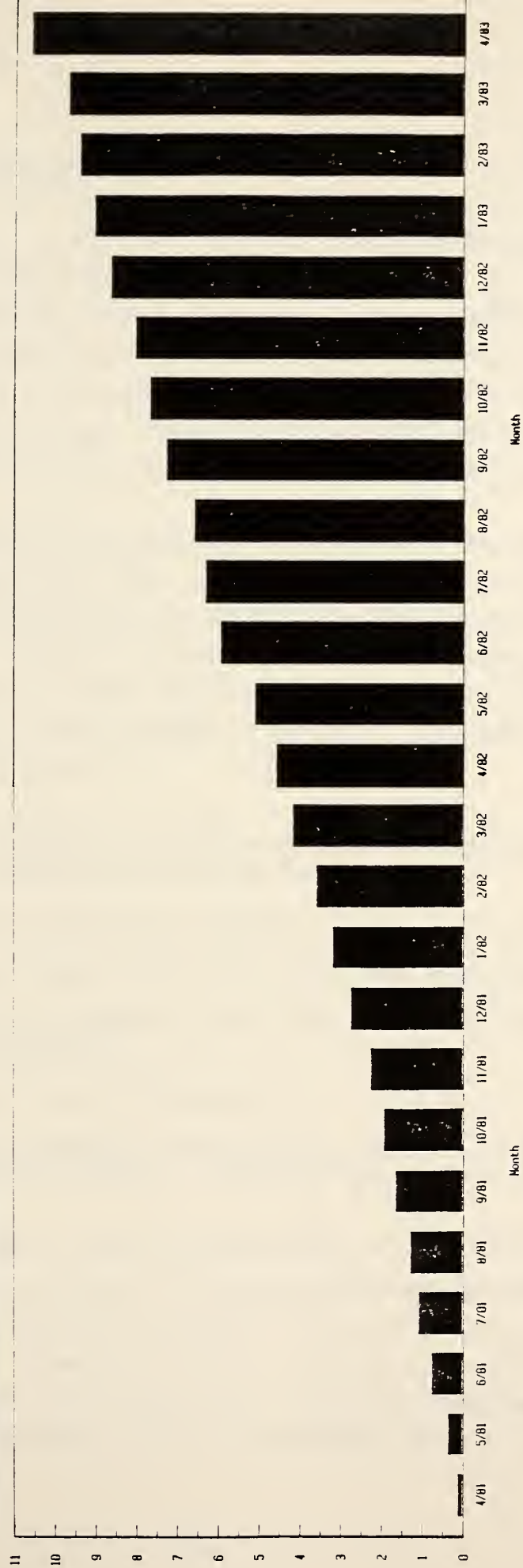


BASED ON UNAUDITED COSTS

EXHIBIT 15

HHS, Office of the Secretary
CUMULATIVE PAYMENTS BY MONTH

BASED ON UNAUDITED COSTS



8. MONITORING AND COMPLIANCE REVIEW

Facility compliance with uniform operating requirements was essential to meet the goals of the MMHD and substantiate the validity of the evaluation findings. The MMHD technical support contractor, Executive Resource Associates, Inc., utilized two principle instruments for facility monitoring and compliance review. These instruments included: (1) an MMHD Quarterly Statistical Report that was completed every three months by each facility and (2) a site visit compliance review based upon a formal, structured compliance review protocol.

The major instrument for monitoring the changes in the facilities' operations during the demonstration was the Quarterly Statistical Report (QSR). The technical support contractor sent QSRs to the MMHD sites at the close of each project quarter. A copy of a QSR is included in the Appendix. The purpose of the QSR was to provide ongoing data on the MMHD implementation progress and highlight current operational problems. The QSR collected data concerning the following issues:

- . Patient Statistics--Unduplicated counts of Medicare Part B and other patients, patient age and sex
- . Referrals--Sources and receivers
- . Staffing--Number and FTE by QMHP and other categories
- . Encounters--Number by type of service for Medicare and non-Medicare patients
- . Funding--Sources and amounts
- . Operating Problems--Identification and description of problem and opportunity to request technical assistance for resolution

Detailed quarterly summary reports representing a compilation and analysis of the QSRs were produced by ERA for the Project Officers and the MMHD Work Group. For the purposes of the evaluation, it was necessary to use some data collected on the QSR. These data relate to the proportion of Medicare beneficiaries to total caseload (see Chapter IV). The data were reported by the facilities on a quarterly basis and are not unduplicated counts. Other data and

information from the QSRs have also been used during the course of the evaluation, however, only as corroborative evidence to data that were collected on site or data developed from the billing and cost reporting system.

During the first year of the demonstration, a two-step review process was developed to ensure compliance with the following minimal set of demonstration requirements:

- . Performance or supervision of provision, by a QMHP, of all on-site covered services as defined in the MMHD manual
- . Provision, by a QMHP, of all off-site covered services if these were billed under the project
- . General supervision by a physician for covered services; on-site supervision at least once every two weeks
- . Psychiatric approval of all treatment plans for MMHD beneficiaries
- . A signed "Patient's Certification Statement for Medicare Part B Beneficiaries" on file for each eligible client
- . A 70 percent overall level of compliance for operations-related requirements, i.e., billing, cost reports, QSRs, etc.

ERA visited the facilities once in the first year of the demonstration and again in the second year. After ERA had conducted the first compliance review, the compliance problems were identified in writing to the appropriate facilities, with instructions to develop and implement a corrective action plan to effectively resolve the problem areas. Facilities not taking immediate action to resolve the most critical requirements as identified above were suspended from the demonstration participation until corrective measures were implemented and documented. The technical support contractor also offered technical assistance as appropriate and requested. The second year's compliance visits focused on: (1) problems identified in the first visit; and (2) requirements for QMHP supervision, physician supervision, psychiatric approval of treatment plans, and completion of the client consent form.

The technical support contractor utilized a standard site visit protocol for both years, outlining the following basic operational procedures for review:

- . Patient Consent Form--Signed for release of confirmation
- . Individual Treatment Plans--Elements: measurable goals, patient strengths and weaknesses, diagnosis, staff responsibility, etc.
- . Progress Notes--Document each encounter, staff provider, and credentials; progress noted in accordance with ITP, etc.
- . Discharge Summary--Final diagnosis, reasons for admission and discharge, etc.
- . Drug (Medication) Use Profile--Drug name, dosage, reasons for using, etc.
- . Utilization Review Plan--Written plan, description of committee structure, meeting frequency, QMHP participation, procedures, etc.
- . Staff Qualifications And Supervision--Psychiatrist on staff biweekly, QMHP on site during service delivery, etc.
- . Claims Processing System--Proper procedures and documentation
- . Cost Reporting--Sufficient documentation to complete MMHD cost reports accurately and properly

A sample Compliance Review Report is included in the Appendix to provide further details on the compliance review process.

At the end of each compliance review cycle, the technical support contractor provided the Project Officers with a written report summarizing compliance deficiencies throughout the demonstration sites. A summary table of compliance problems identified by the five major compliance areas listed previously is presented in Exhibit 16. The exhibit shows that most of the demonstration facilities were in compliance with the most critical requirements during the MMHD. Considerable improvement is demonstrated between the first and second year compliance visits, with 90 percent or more of the facilities in compliance with all major requirements by the second visit. The biggest deficiencies in the first year were failures to attain psychiatric approval of treatment plans and client signature on consent forms. There was dramatic improvement in both areas between the first- and second-year compliance visits. Overall, the facilities had the least problems (90 percent higher compliance average) with meeting the

EXHIBIT 16

HHS, Office of the Secretary

MMHD ANNUAL COMPLIANCE SITE VISIT SUMMARY

| Compliance Area | NUMBER OF FACILITIES IN COMPLIANCE | | | | | | | | | |
|---|------------------------------------|------|----|-------|--------------------------|---------------------------|------|----|-------|--------------------------|
| | FIRST ANNUAL SITE VISITS | | | | | SECOND ANNUAL SITE VISITS | | | | |
| | CMHC | AMHC | PH | Total | Overall Compliance Level | CMHC | AMHC | PH | Total | Overall Compliance Level |
| 1. QMHP Staffing | 14 | 12 | 10 | 36 | 87.5% | 13 | 11 | 13 | 37 | 92.5% |
| 2. Physician Supervision | 14 | 13 | 14 | 41 | 100.0% | 14 | 12 | 14 | 40 | 100.0% |
| 3. Psychiatric Approval of All Treatment Plans | 4 | 8 | 8 | 20 | 47.5% | 13 | 9 | 14 | 36 | 90.0% |
| 4. Signed Patient Consent Forms | 8 | 9 | 9 | 26 | 62.5% | 13 | 11 | 14 | 38 | 95.0% |
| 5. 70% Compliance Level in Aggregate Programmatic Areas | 14 | 9 | 10 | 33 | 80.0% | 14 | 12 | 14 | 40 | 100.0% |
| Number of Participating Facilities | 14 | 13 | 14 | 41 | -- | 14 | 12 | 14 | 40* | -- |

* One AMHC facility withdrew participation in the second year.

Source: ERA MMHD Final Project Report, Sept. 1983.

physician supervision, QMHP staffing, and aggregate program requirements, although three facilities in the second year still had not fully met QMHP guidelines.

IV. IMPACT EVALUATION

IV. IMPACT EVALUATION

This chapter reports quantitative as well as qualitative measures of the impact of the demonstration waivers as implemented during its two-year period. As distinguished from the implementation assessment and process evaluation, impact evaluation focuses on a number of specific beneficiary outcome measures relating to service utilization, and program outcome measures relating to shifts in service delivery and changes in the cost of providing services, and standards set for professionals. For the most part, quantitative measures have been analyzed statistically.

There are six major analysis questions that are addressed in the impact evaluation, five of which are reported on in this chapter:

- . How is the utilization of mental health services affected by the demonstration?
- . How is the beneficiary population affected by the demonstration?
- . How are the costs, charges, and reimbursements for ambulatory mental health services affected by the demonstration?
- . How are the characteristics of participating sites affected by the demonstration?
- . Is the quality of care affected by the demonstration? If so, how?

Each of these major analysis questions has a number of research questions associated with it.^{1/} The analysis of offsets must await further data collection and analysis and will be reported in an addendum to the final project evaluation report.

^{1/} See Evaluation Plan for the Medicare Mental Health Demonstration, submitted to Office of the Assistant Secretary for Planning and Evaluation. Prepared by Macro Systems, Inc., March 9, 1981.

In examining the data analyses reported in this chapter, there are several general points that should be noted. These relate to the sources of data and the statistical tests employed.

Sources Of Data--There are six sources of data that were used in the impact analysis. These include:

- Beneficiary Clinical Abstracting Form--This form completed by Macro field staff included data on beneficiary characteristics, beneficiary termination, services, charges, and reimbursements.^{2/}
- Quarterly Statistical Reports--These reports were submitted to Executive Resources Associates, Inc. (the demonstration contractor), by each demonstration facility and included data on the number of Medicare beneficiaries served, total caseload, staffing, revenues, size of facility budgets, etc.
- ODR Cost Reports--These reports were submitted to the HCFA Office of Direct Reimbursement (the fiscal intermediary for the demonstration) by each demonstration site and included data on costs and service encounters (and partial hospitalization hours) by provider type for Medicare beneficiaries as well as the total facility caseload.
- The Program Interview Guide--This was the instrument for data collection, based on personal interviews with facility staff and directors, of programmatic and facility-specific outcomes of the demonstration.
- The MMHD Billing Form--These represented the claims for beneficiary services reimbursement submitted to ODR typically on a monthly basis throughout the demonstration. The demonstration period services and charges data included in the analyses are based on these data.
- HCFA AE-11 Reports (July 1, 1980 and July 1, 1981)--These HCFA-maintained reports contain Medicare enrollee data by State and zip code within each State. They were accessed for the empirically defined service areas for each demonstration site in order to calculate the utilization rates reported herein.

Statistical Tests Employed--As mentioned, the analyses reported here represent prewaiver (baseline) and postwaiver (demonstration) comparisons of a number of beneficiary outcome measures. Three different types of statistical tests were employed:

^{2/} Ibid.

Subsequent to the design of the evaluation plan, three-way comparisons were determined to be more appropriate, i.e., baseline only, demonstration only, baseline and demonstration. Each beneficiary was classified in one of these categories depending on whether he/she received services in the given period.

- 2-sample t-test of means testing the hypothesis that a baseline mean is significantly different from a demonstration mean, i.e., the null hypothesis $H_0: X_{\text{Base}} = X_{\text{Demo}} = X_{\text{Both}}$ against the alternative hypothesis that $H_A: X_{\text{Base}} \neq X_{\text{Demo}} \neq X_{\text{Both}}$
- 2-sample z-test of means testing the hypothesis that a baseline proportion is significantly different from a demonstration mean, i.e., the null hypothesis $H_0: P_{\text{Base}} = P_{\text{Demo}} = P_{\text{Both}}$ against the alternative hypothesis that $H_A: P_{\text{Base}} \neq P_{\text{Demo}} \neq P_{\text{Both}}$
- Chi-square test of independence testing the hypothesis that a baseline distribution is significantly different from a demonstration distribution, i.e., the null hypothesis $H_0: f(i)_{\text{Base}} = f(i)_{\text{Demo}} = f(i)_{\text{Both}}$ against the alternative hypothesis that $H_A: f(i)_{\text{Base}} \neq f(i)_{\text{Demo}} \neq f(i)_{\text{Both}}$

The results of each of the above tests were reported against the p less than .05, p less than .01, and p less than .001 levels of significance.

A few additional analytical considerations should be noted. Originally CMHCs were considered as providing one distinct service component and statistical data were aggregated across all CMHC beneficiaries and facilities. However, as the demonstration progressed it was found that a substantial number of CMHCs were utilizing partial hospitalization as a major service component. The utilization and cost of the services provided to these partial hospitalization beneficiaries was believed to be quite different from the CMHC beneficiaries receiving outpatient or ambulatory services only. For this reason, the data are reported separately for two separate CMHC service components: (1) CMHC-outpatient services only (CMHC-OP) and (2) CMHC-partial hospitalization, as well as outpatient services (CMHC-PH). Although the distinction is not a

facility distinction, but rather a distinction between the mix of services provided to CMHC beneficiaries, the CMHCs are separated into these two components when discussing facility types. Moreover, all beneficiaries receiving one or more partial hospitalization services in a CMHC are classified as being part of the CMHC partial hospitalization component. Although this is a somewhat artificial classification, it was felt that it was the most appropriate way to operationalize the distinction. Therefore, where applicable, the data reported are often broken into the following four facility/service component types.

- . CMHC--OP: Outpatient services only in CMHCs
- . CMHC--PH: Partial hospitalization services as well as outpatient services in CMHCs
- . AMHC: Ambulatory Mental Health Centers (outpatient services only)
- . PHP: Partial Hospitalization Programs (primarily partial hospitalization services with some ancillary outpatient services)

It is also important to consider the mix of services provided in each of the four facility types and how this impacts the analysis. According to the MMHD guidelines:

- . CMHCs could bill the demonstration for Outpatient Mental Health Services, Partial Hospitalization, and Ancillary services (such as x-rays, lab tests, etc.).
- . AMHCs could bill the demonstration for Outpatient Mental Health Services and Ancillary services (such as x-rays, lab tests, etc.).
- . PHPs could bill the demonstration for Partial Hospitalization, Ancillary services (such as x-rays, lab tests, etc.) and non-routine Outpatient Mental Health Services (such as individual therapy, group therapy, etc.) delivered ancillary to Partial Hospitalization.

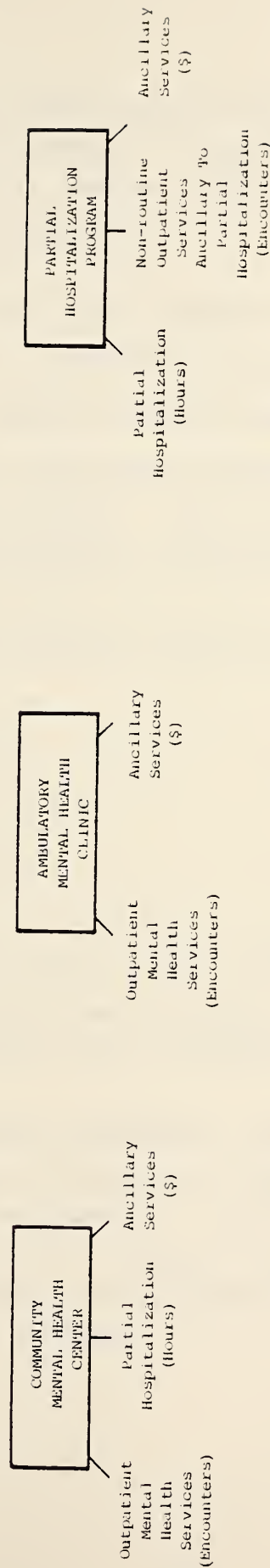
Each of these types of services was billed in a different unit of measure as shown in Exhibit 17.

- . Outpatient Mental Health Services--ENCOUNTERS
- . Partial Hospitalization--HOURS
- . Ancillary Services--DOLLARS

EXHIBIT 17

IHS, Office of the Secretary

COVERED SERVICE CATEGORIES AND MEASURES
BY TYPE OF FACILITY



Thus, data entered the evaluation database from the ODR billing tapes with different utilization measures. In this chapter, only the first two categories shown above are treated. Analysis based on the ORD Cost Reports data was separated into five different groups:

- . CMHC--OP: CMHC-Outpatient Mental Health Services
- . CMHC-PH: CMHC-Partial Hospitalization
- . AMHC: AMHC-Outpatient Mental Health Services
- . PHP--PH: PHP-Partial Hospitalization
- . PHP-OP Ancillary: PHP-Outpatient Mental Health Services delivered ancillary to Partial Hospitalization

These groups were then typically recombined into two categories with the same measures as follows:

- | | |
|------------|------------|
| . CMHC--OP | |
| . AMHC | ENCOUNTERS |
| . PHP--OP | |
| | |
| . CMHC--PH | HOURS |
| . PHP--PH | |

Thus, for specific analyses in this chapter, it is important to understand the sources of data and the form of the data reported in order to fully appreciate the analyses and understand their generalizability.

One additional analytic consideration relates to the reporting of primary diagnosis. For purposes of analysis and reporting of beneficiary diagnosis and its relationship to service utilization, it was necessary to collapse the primary diagnoses into 10 categories. Although this is undesirable from a clinical standpoint, it was necessary for identifying statistical relationships. These categories were created as follows:

| <u>Major Diagnostic Category</u> | <u>First Three Digits of DSM-III</u> |
|--|---|
| 1. Organic Mental Disorders | 290, 291, 292, 293, 294, 310 |
| 2. Substance Use Disorders | 303, 304, 305 |
| 3. Schizophrenic Disorders | 295 |
| 4. Paranoid and Other Psychotic Disorders | 297, 298 |
| 5. Affective Disorders | 296, 301 |
| 6. Anxiety, Somatoform, and Dissociative Disorders | 300, 308 |
| 7. Adjustment Disorder | 309 |
| 8. Disorders Usually First Evident in Infancy, Childhood, or adolescent | 299, 307, 312, 313, 314, 315, 317, 318, 319 |
| 9. Other Disorders | 302, 306, 311, 316 |
| 10. Conditions Not Attributable to a Mental Disorder or Diagnosis Deferred | 15, 61, 62, 65, 71, 799 |

The methodology used and findings of the analysis addressing each of the five major analysis questions are reported below.

1. HOW WAS THE UTILIZATION OF MENTAL HEALTH SERVICES AFFECTED BY THE DEMONSTRATION?

The demonstration was an outgrowth of a need expressed by the President's Commission on Mental Health to provide more comprehensive Medicare benefits for ambulatory mental health services. The parameters of the demonstration waivers were expected to notably affect the utilization of services by beneficiaries at the demonstration sites. First, the quantity (number of services or encounters) and intensity (services per unit of time) of services utilized was expected to increase as a direct function of the increased \$750 limit and the no-limit conditions. Outpatient service utilization was expected to increase relative to inpatient services as a result of increasing the incentives for outpatient services. The no-limit conditions in some sites were expected to provide an indication of how much of an increase in service utilization could be expected under no-limit conditions. Comparative analyses of the \$250 (comparison sites), \$750, and no-limit sites (for CMHCs and AMHCs only) provides useful experience measures for establishing future policy regarding limits.

In addition to the quantity of services, the types of ambulatory mental health providers and services were expected to be influenced by the demonstration waivers. With the expansion of the supervisory role to include QMHPs (from physicians only to psychologists, psychiatric social workers, and psychiatric nurses) and the inclusion of ancillary services, sites could be reimbursed for services under more flexible conditions that were, perhaps, more in tune with the realities of current clinical practice. More varied types of services were expected to be utilized by the beneficiaries under the demonstration as the sites were financially permitted to go beyond the traditional physician-supervised services provided by others.

This section describes and compares beneficiary utilization of services in the baseline and demonstration periods.^{3/} Included are statistical descriptions

^{3/} The baseline period includes any service provided to a beneficiary from April 15, 1979, to April 14, 1981. The demonstration period here includes any service provided to a beneficiary on or after April 15, 1981, through April 14, 1983, only.

of services in terms of the types and amounts of services received for each time period as well as information on the personnel type or the "provider of record" for such services.

There are several qualifications regarding the utilization data. First, each facility defined services in a unique number. Although there were similarities in most service descriptions across facilities, in general, there was not a one-to-one correspondence in service definitions among facilities. For example, a psychological evaluation in one facility may simply mean a face-to-face interview between a client and psychologist, whereas in another facility, it may mean a face-to-face interview plus extensive psychological testing and interpretation of the tests. Thus, there is no total comparability in reported service utilization across facilities. However, it should be noted that comparability was enhanced under the demonstration because of the conformity to demonstration requirements. Second, documentation requirements for service utilization reporting varied extensively across facilities. For example, some facilities have historically required preparation of a written progress note, to be entered into the client's clinical record, for each service rendered. Other facilities' requirements are less stringent so that service utilization from some facilities may be underreported, particularly for the baseline period. However, this is another instance in which the demonstration requirements enhanced across-facility comparability. Third, increases in utilization in the demonstration period may have been due to true increases in service utilization and/or reporting. Such observed increases need to be balanced against changing facility characteristics.

The services and personnel described correspond to the categorizations employed throughout the entire demonstration. However, it was found to be useful to combine some of the types of services defined in the demonstration into broader categories for analytic purposes. The service types as reported included the following:

| Services As Reported | Includes |
|--------------------------------|--|
| Individual Therapy | Individual Therapy |
| Group Therapy | Group Therapy |
| Medication Therapy | Medication Therapy Medication Review Drugs |
| Partial Hospitalization | Partial Hospitalization |
| Other Mental Health Services | Family Therapy Marital/Couple Therapy Alcoholism/Substance Abuse Treatment Crisis Intervention/Emergency Service |
| Other Therapeutic Services | Audiology Speech Therapy Occupational Therapy Other Therapeutic Services Recreation Therapy Expressive Arts Therapy |
| Other Diagnostic Services | Physical Exam Lab Tests X-Rays Other Diagnostic Services |
| Psychosocial History/Intake | Intake Interview/Psychosocial History |
| Psychiatric/Psychological Exam | Psychological Exam and Testing |
| Other | Other and Nonspecified Services Consultation |

The following specific analysis questions relating to services utilization by beneficiaries were addressed:

- . Were these differences in the types of mental health services utilized by the beneficiaries from the baseline to demonstration periods?
- . Were there differences in the intensity of mental health services provided to beneficiaries from the baseline to demonstration periods?
- . Were there differences in the types of providers of ambulatory mental health services utilized by the beneficiaries from the baseline to demonstration periods?

(1) Were There Differences In The Types Of Mental Health Services Utilized By The Beneficiaries From The Baseline To Demonstration Periods?

Three types of analyses were undertaken to address this question. The first analysis examined, in a global sense, the various combinations of services received by beneficiaries in the two periods. The second analysis compared the percentage of beneficiaries receiving each specific service in the two periods. The third analysis compared the distributions of ambulatory service encounters across specific services for the two periods.

Combinations Of Services

It was believed that the MMHD might have some impact on the mix or combination of services received by the beneficiaries. To examine this question, the percentage distribution of beneficiaries receiving each distinct combination of services was constructed for the baseline and demonstration periods. In total, there were 1,024 (2^{10}) possible combinations of services. Although only a small number of combinations were initially expected to occur, reflecting common service mixes, over 130 different combinations were observed that were too numerous for analytic purposes. Therefore, we collapsed the service categories further into the following six broad groups and reconstructed the distributions.

| <u>New Category</u> | <u>As Reported</u> |
|-------------------------|--|
| Individual Therapy | Individual Therapy |
| Group Therapy | Group Therapy |
| Medication Therapy | Medication Therapy Medication Review Drugs |
| Partial Hospitalization | Partial Hospitalization |

| New Category | As Reported |
|------------------------------|--|
| Other Mental Health Services | Family Therapy Marital/Couple Therapy Alcoholism/Substance Abuse Treatment Crisis Intervention/Emergency Service Audiology Speech Therapy Occupational Therapy Other Therapeutic Services Recreation Therapy Expressive Arts Therapy Psychosocial History/Intake Psychiatric/Psychological Exam |
| Other Diagnostic Services | Physical Exam Lab Tests X-Rays Other Diagnostic Services Consultation Other and Nonspecified Services |

Even with these collapsed categories, 58 out of 64 possible combinations occurred in the baseline period, and 62 out of 64 occurred in the demonstration period. However, as reported in Exhibit 18, the ten most frequent service combinations accounted for approximately 70 percent of the beneficiaries in each period. Highlights of the findings follow:

- . Baseline Period--The most frequently occurring service combinations were other only which included such items as physical examinations and laboratory tests (15 percent), individual therapy and other mental health service (12 percent), other mental health service only (10 percent) and partial hospitalization only (9 percent).
- . Demonstration Period--The most frequently occurring service combinations were individual therapy only (19 percent), individual therapy and other mental health service (13 percent), other mental health service only (12 percent), and partial hospitalization only (11 percent). The percent receiving individual individual therapy only increased substantially from 4 percent to 19 percent from the baseline period to the demonstration period. The decrease in the "other" only category from baseline to demonstration is probably due to more specific reporting in the demonstration period. The percent receiving medication therapy only decreased (4 percent to 1 percent) in the demonstration period, perhaps reflecting a somewhat less disabled population in the demonstration.

Given this overview, it is important to examine the utilization of specific services by facility type. In particular, the reduction of medication therapy would seem to imply an influx of new, less severely disordered Medicare beneficiaries in the demonstration period.

Percent Of Beneficiaries Receiving Specific Services

This analysis compares the percent of beneficiaries receiving specific services in the baseline period demonstration period and both periods by facility type for the following:

- . All beneficiaries (Exhibit 19)
- . Beneficiaries under age 65 (Exhibit 20)
- . Beneficiaries aged 65 and over (Exhibit 21)
- . Beneficiaries with no previous mental health treatment (Exhibit 22)
- . Beneficiaries with some previous mental health treatment (Exhibit 23)

Highlights of the findings follow:

- . Baseline Period--Slightly less than half (48 percent) of all beneficiaries received individual therapy. This held true for younger as well as older beneficiaries, and beneficiaries with and without previous mental health treatment. Only 15 percent of the PHP beneficiaries received individual therapy as a nonroutine outpatient service ancillary to partial hospitalization; 64 percent of the AMHC clients received individual therapy. Medication therapy was received by slightly more than one-third (36 percent) of all beneficiaries; however, it was more common among beneficiaries under age 65 (42 percent) and beneficiaries with previous mental health treatment (44 percent) than among beneficiaries aged 65 and over (28 percent) and beneficiaries with no previous mental health treatment (28 percent).
- . Demonstration Period--There were significant increases in the percentage of beneficiaries receiving individual therapy (48 percent to 60 percent), group therapy (15 percent to 19 percent), partial hospitalization (16 percent to 20 percent), and other services (16 percent to 22 percent). There were significant decreases in the percentage of beneficiaries receiving medication

therapy (36 percent to 15 percent), other therapeutic services (13 percent to 6 percent) and psychiatric/psychological exams (30 percent to 19 percent). These general findings were true, irrespective of age and previous mental health treatment status. There were also significant differences among the programs in the demonstration as to the entire range of services provided to beneficiaries. Clearly the CMHCs, AMHCs and PHPs treated beneficiaries with a different array of services.

Distribution Of Ambulatory Service Encounters

In addition to comparing the percentage of beneficiaries receiving each specific service in the two periods, it is useful to compare the distributions of total ambulatory service encounters across the specific types of services. This analysis provides a different picture of service utilization, focusing on the relative amounts of specific services delivered by the facilities. It should be noted that partial hospitalization service is removed from the analysis because its utilization is measured in hours and would, thus, skew the distributions and mask the relationships among the ambulatory services. Therefore, the service encounters reported for the PHPs represent nonroutine outpatient mental health services ancillary to partial hospitalization. Moreover, a few services ancillary to mental health treatment (physical exam, lab tests, x-rays, and other diagnostic services) are not included because encounters are not reported in the ODR billing system.

The analysis compares the percent of service encounters by service type in the baseline and demonstration periods by facility type for the following:

- . All beneficiaries (Exhibit 24)
- . Beneficiaries under age 65 (Exhibit 25)
- . Beneficiaries age 65 and over (Exhibit 26)
- . Beneficiaries with no previous mental health treatment (Exhibit 27)
- . Beneficiaries with some previous mental health treatment (Exhibit 28)

Highlights of the findings follow:

- . Baseline Period--Across the facility types, the most commonly delivered services were individual therapy (33 percent), medication therapy (23 percent), group therapy (19 percent), and other services (8 percent). In AMHCs, a greater percentage of the total encounters were individual therapy (41 percent) and medication therapy (32 percent), as compared to the other facility types. Medication therapy constituted a higher percentage of the total encounters for beneficiaries under age 65 (29 percent) and with previous mental health treatment (26 percent).
- . Demonstration Period--The distributions of ambulatory service encounters were significantly different ($p = .001$) for all facility types, age groups, and levels of previous mental health treatment. However, because the N s (number of encounters) involved were so substantial, the statistical tests had very high power. By comparing the baseline period to the demonstration period it can be seen that individual therapy constituted a higher percentage of the total service encounters (33 percent to 48 percent). Group therapy also showed an increase (19 percent to 24 percent), with a corresponding decrease in medication therapy encounters (23 percent to 7 percent). Other services increased (9 percent to 12 percent). This pattern of change was accentuated in the PHPs. The same general pattern of change was evident for younger and older beneficiaries and beneficiaries with and without previous mental health treatment.

Summary

The utilization of individual therapy increased from the baseline to the demonstration period, as is reflected in the distributions of the combination of services, the percentage of beneficiaries receiving the service, and the percentage of total service encounters provided to all beneficiaries. Likewise, the utilization of group therapy increased, and the utilization of medication therapy decreased. It is likely that these changes reflect differential service needs of persons entering MMHD facilities during the demonstration and an incentive to provide those services within the professional practice purview of QMHPs.

(2) Were There Differences In The Intensity Of Mental Health Services Provided To Beneficiaries From The Baseline To The Demonstration Periods?

To address this question, the intensity of service utilization was defined as the average number of service units provided to a beneficiary over a six-month time period. Only beneficiaries who received one or more services in the half-year period were included in the intensity computation. Ambulatory service units were reported as encounters, whereas partial hospitalization service units were reported as hours. Thus, intensity is defined as: (1) encounters per beneficiary for ambulatory services and (2) hours per beneficiary for partial hospitalization services. This intensity measure was computed for each of the four half-year periods (Periods 1 to 4) constituting the two-year baseline period and the four half year periods of the demonstration (Periods 5 to 8). For the baseline period, services were recorded in clinical records, with such records being abstracted by us. For the demonstration period, services were reported to HCFA on claim forms.

Because it was believed that the intensity of services for beneficiaries new to a facility in the demonstration period might differ from the intensity of services for beneficiaries who entered the facility prior to the demonstration, a separate analysis was carried out for the following three beneficiary groups:

- . Beneficiaries receiving baseline services only
- . Beneficiaries receiving demonstration services only
- . Beneficiaries receiving baseline and demonstration services

The analyses were also carried out by facility type and for beneficiaries under age 65, those aged 65 and over, those with no previous mental health treatment, and those with some previous mental health treatment.

The data described are derived from the following sources:

- . Baseline utilization data are from the database created by the Beneficiary Clinical Abstracting Form--Services, Charges, and Reimbursements.
- . Demonstration utilization data are from the database created by the ODR Billing Files.
- . The age and previous mental health data are from the database created by the Beneficiary Clinical Abstracting Form.

Intensity Of Ambulatory Services

Exhibits 29 through 33 display the service intensity for ambulatory service encounters (including services ancillary to mental health treatment in all facilities and those nonroutine outpatient mental health services ancillary to partial hospitalization in PHPs). Highlights of the findings follow:

- . Baseline Period--The recorded encounters in the baseline period show that CMHC-PH beneficiaries received the most intensive ambulatory services (24.5 encounters per beneficiary), followed by CMHC-OP beneficiaries (14.2 encounters per beneficiary), AMHC beneficiaries (7.7 encounters per beneficiary), and PHP beneficiaries (10.3 encounters per beneficiary--the least intensive services). The majority of services provided to PHP beneficiaries represent partial hospitalization. Beneficiaries who received services in both the baseline and demonstration periods utilized more intensive services (14.2 encounters per beneficiary) than beneficiaries who received services in the baseline period only (10.3 encounters per beneficiary). Beneficiaries who received longer-term services would be expected to be more intensive users.

The intensity of services utilized by beneficiaries under age 65 was the same as (12.5 encounters per beneficiary) that for beneficiaries aged 65 and over (12.5 encounters per beneficiary). Ambulatory service intensity also does not appear to have differed substantially for those beneficiaries with and without previous mental health treatment (12.9 encounters per beneficiary with some previous treatment, 11.1 per beneficiary without previous treatment).

Demonstration Period--The encounters reported on the ODR billing forms show a substantial drop in the intensity of services for all beneficiaries. Part of this is believed to be due to the difference between recorded encounters in the baseline period and reported encounters in the demonstration period. However, it is evident that the intensity of services provided in the demonstration dropped for all beneficiaries, regardless of whether they were served in the baseline period. The intensity of services appears to have dropped in a similar fashion for younger and older beneficiaries and beneficiaries with and without previous mental health treatment. The average for all beneficiaries was 7.2 encounters per beneficiary, with the CMMC-OPs at 6.6, the CMHC-PHs at 10.9, the AMHCs at 6.3 and the PHPs at 34.0. This last figure is quite large however, it is an average based on very few PHP beneficiaries who received ambulatory services in addition to partial hospitalization.

Exhibits 34 and 35 provide similar measures of intensity of ambulatory service encounters by service and provider types for each of the three groups of beneficiaries. These breakdowns tend to substantiate the overall trends in service intensity from the baseline to the demonstration periods, with these trends being most pronounced for the younger and previously treated populations. A summary is provided below:

| <u>Providers</u> | <u>Status</u> |
|---------------------------|----------------------|
| Psychiatrist | No change |
| Non-Psychiatric physician | No change |
| QMHP psychologist | No change |
| Other psychologist | Substantial decrease |
| Psychiatric nurse | Slight increase |
| Other nurse | Substantial decrease |
| Psychiatric social worker | No change |
| Other social worker | Substantial decrease |
| Counselor | Substantial decrease |
| Other | Slight decrease |

| <u>Services</u> | <u>Status</u> |
|--------------------------------|----------------------|
| Individual therapy | Slight decrease |
| Group therapy | Substantial decrease |
| Medication therapy | Substantial decrease |
| Other mental health services | Slight decrease |
| Other therapeutic services | Substantial decrease |
| Other diagnostic services | Substantial decrease |
| Psychosocial history/intake | No change |
| Psychiatric/psychological exam | No change |
| Other services | Substantial decrease |

It is interesting to note that the intensity of service encounters provided by QMHPs remained fairly constant from the baseline to the demonstration period, but that the intensity of services provided by all other personnel types appeared to decrease.

Intensity Of Partial Hospitalization Services

Exhibits 36 and 37 provide a comparable analysis of intensity of partial hospitalization services measured in hours per beneficiary in each of the eight half-year periods. Only CMHC-PH and PHP facilities were allowed to bill for partial hospitalization services. This analysis is subject to the same caveats pertaining to the intensity of ambulatory services. Highlights of the findings follow:

- . Baseline Period--The recorded hours show that PHPs generally provided more intensive partial hospitalization services than did CMHC-PHs. It should be noted that CMHC-PHs, in turn, provided more intensive outpatient services to the same population than the PHPs provided to the same population (see previous discussion). In the PHPs, the beneficiaries who received partial hospitalization in the baseline period received substantially less intensive services than those who received partial hospitalization in both the baseline and demonstration periods--reflecting a longer-term, more disabled population. There were virtually no recorded hospitalization services provided to beneficiaries in CMHCs in the baseline period.

Beneficiaries age 65 and over received less intensive partial hospitalization services than did beneficiaries under age 65. There were virtually no beneficiaries without previous mental health treatment who received partial hospitalization in the baseline period.

- . Demonstration Period--There were substantial changes in the reported intensity of partial hospitalization services from the baseline to demonstration period. First, the intensity dropped overall, as did the intensity of ambulatory service encounters. As before, it seems that much of this drop was due to reporting inconsistencies in the two periods. PHPs continued to provide more intensive partial hospitalization services than did CMHC-PHs for the same reasons mentioned before. Moreover, older beneficiaries and previously treated beneficiaries received less intensive services than did younger and previously treated beneficiaries, regardless of whether or not they received baseline services. Beneficiaries receiving demonstration services only received less intensive partial hospitalization services than did beneficiaries receiving services in both periods.

Second, CMHCs provided a substantial number of partial hospitalization services in the demonstration period, as was encouraged by the no-limit conditions of the MMHD reimbursement scheme for partial hospitalization.

Summary

There appears to have been an overall decrease in the intensity of ambulatory and partial hospitalization services in the demonstration period. Although much of this decrease is believed to have been due to inconsistencies between recorded units in the baseline period and reported units in the demonstration period, there appear to have been fewer services on the average delivered to a larger group of beneficiaries. Service intensity was generally higher for younger and for previously served populations. CMHCs provided few partial hospitalization encounters in the baseline period but began providing a substantial number in the demonstration, with an intensity roughly 60-70 percent of that provided by the PHPs.

(3) Were There Differences In The Types Of Providers Of Ambulatory Mental Health Services Utilized By The Beneficiaries From The Baseline To Demonstration Periods?

The same three types of analyses were carried out to address this question as those for the examination of the differences in types of services in Question (1). These included an analysis of the combinations of services provided by various types of personnel, an examination of the percent of beneficiaries receiving services provided by various types of personnel, and the distribution of total service encounters across the types of personnel providing the service. In addition, the cross-tabulations of service encounters by type of service and type of personnel providing the service were compared for the baseline and demonstration periods.

Combinations Of Service Providers

The demonstration was expected to have a impact on the mix or combinations of personnel providing services. Following the same steps as in the previous analysis of services, a percentage distribution of each distinct

combination of providers was constructed for the baseline and demonstration periods. The providers were collapsed into the following six groups to provide a workable number for this global analysis.

QMHPs

- Psychiatrist
- QMHP psychologist
- Psychiatric nurse
- Psychiatric social worker

Non-QMHPs

- Nonpsychiatric physician
- Other provider

Even with these collapsed categories, 34 out of 64 possible combinations occurred in the baseline period, and 43 out of 64 occurred in the demonstration period. However, as displayed in Exhibit 38, ten of the provider combinations accounted for over 90 percent of the beneficiaries in both the baseline period and demonstration period. Highlights of the findings follow:

- . Baseline Period--The most frequently occurring combination of providers was psychiatrist only (30 percent), other only (20 percent) psychiatrist/other (18 percent), and psychiatric social worker (8 percent).
- . Demonstration Period--The most frequently occurring combination of providers was psychiatric social worker only, which increased substantially from the baseline period (8 percent to 25 percent), reflecting a reliance on this QMHP as a major service provider in the demonstration. Largely reflecting QMHP requirements, the provider combination of other only decreased substantially (20 percent to 11 percent). The frequency of cases where services were provided by the psychiatrist only decreased (30 percent to 14 percent), reflecting the use of nonpsychiatric QMHPs as the primary provider under the demonstration. This is also evident in the reduction in the provider combination of psychiatrist/other (18 percent to 14 percent).

Given this overview, it is important to examine the delivery of services by specific types of personnel by facility type.

Percent Of Beneficiaries Receiving Services Delivered By Specific Types Of Personnel

This analysis compares the percent of beneficiaries receiving services from specific types of personnel in the baseline and demonstration periods, by facility type, for the following:

- . All beneficiaries (Exhibit 39)
- . Beneficiaries under age 65 (Exhibit 40)
- . Beneficiaries age 65 and over (Exhibit 41)
- . Beneficiaries with no previous mental health treatment (Exhibit 42)
- . Beneficiaries with previous mental health treatment (Exhibit 43)

Highlights of the findings follow:

- . Baseline Period--Well over half (64 percent) of all beneficiaries received one or more services from a psychiatrist. Psychiatric social worker (24 percent), other nurse (22 percent) other psychologist (11 percent), and other social worker (10 percent) were the next most frequent providers of services to beneficiaries. The PHPs exhibited a somewhat different provider pattern from the CMHCs and AMHCs, where the most common provider was the psychiatric social worker (39 percent), followed by the counselor (26 percent), the other psychologist (25 percent) and the psychiatrist (19 percent), who provided services to substantially fewer beneficiaries than in the CMHCs and AMHCs. Across all facilities, psychiatrists provided services to a substantially larger percentage of beneficiaries under age 65 (74 percent) and to those with previous mental health treatment (76 percent) than to those aged 65 and over (53 percent) and to those with no previous mental health treatment (58 percent).
- . Demonstration Period--There were significant increases in the percent of beneficiaries receiving services delivered by the following QMHPs:
 - QMHP psychologist (7 percent to 11 percent)
 - Psychiatric social worker (23 percent to 47 percent)

Significant increases in the percent of beneficiaries receiving services delivered by the following non-QMHPs were also experienced:

- Nonpsychiatric physician (1 percent to 6 percent)
- Counselor (8 percent to 19 percent)

The percent of beneficiaries receiving services from the other categories of providers decreased. Some of these observed changes are likely due to more specific reporting of services in the demonstration period, particularly the large decrease in the "other" category (21 percent to 7 percent).

For CMHCs, the percentage of beneficiaries served by QMHP psychologists decreased (CMHC-OP from 7 percent to 6 percent and CMHC-PH from 15 percent to 7 percent), unlike the AMHCs and PHPs. The percent of beneficiaries served by psychiatrists decreased in AMHCs (57 percent to 43 percent). In PHPs, the percentage of beneficiaries served by psychiatric social workers and counselors decreased in contrast to CMHCs and AMHCs. However, the percentage of beneficiaries served by psychiatrists increased dramatically in PHPs (19 percent to 67 percent) clearly as a result of the MMHD.

The percent of beneficiaries served by psychiatric social workers increased more dramatically for beneficiaries aged 65 and over (25 percent to 56 percent) and for beneficiaries with no previous mental health treatment (29 percent to 57 percent) than for the younger (22 percent to 35 percent) and previously treated populations (23 percent to 38 percent). This reflects the increased use of the psychiatric social worker with the new elderly and less disabled beneficiaries served in the demonstration period.

Distribution Of Ambulatory Services Provided By Various Personnel Types

In addition to comparing the percentage of beneficiaries served by each specific type of personnel, it is useful to compare the distributions of total ambulatory service encounters across the specific types of personnel providing the service, as shown in Exhibits 44 to 48. It should be noted that partial hospitalization services are not included in this analysis because the provider was not reported on the ODR billing form. Highlights of the findings follow:

- Baseline Period--Across all facility types, the largest percentage of encounters was provided by other nurses (20 percent), followed by psychiatrists (20 percent), other social workers (17 percent), and psychiatric social workers (13 percent). In PHPs, a large percentage of encounters were also provided by counselors (23 percent), whereas only 6 percent of the encounters were provided by psychiatrists. Psychiatrists provided a larger percentage, and psychiatric social workers provided a smaller percentage of service encounters to the younger and previously treated beneficiary populations than to the older and previously untreated populations.

Demonstration Period--The distributions of services encounters across type of personnel were significantly different (p less than .001) for all facility types, age groups, and levels of previous mental health treatment. However, because the Ns (number of encounters) involved were so substantial, the statistical tests had very high power. The percentage of encounters provided by QMHPs increased, particularly for psychiatric social workers, although the percentage for psychiatric nurses remained statistically unchanged.

- Psychiatrist (20 percent to 28 percent)
- QMHP psychologist (2 percent to 5 percent)
- Psychiatric social worker (13 percent to 33 percent)

Corresponding decreases were observed for the non-QMHPs, as was expected under the demonstration. The increase in the encounters provided by the psychiatrist was particularly evident in the PHPs, where the percentage increased almost sevenfold (6 percent to 40 percent), reflecting the added use of the psychiatrist to meet, at a minimum, MMHD psychiatric supervision requirements.

The percentage of encounters provided by the psychiatrist decreased in the AMHCs (25 percent to 16 percent); this was largely offset by a substantial increase in the service encounters provided by the psychiatric social worker (14 percent to 51 percent). The percentage of service encounters provided by the psychiatric social worker increased more substantially for the older and previously untreated populations.

Cross-Tabulation Of Ambulatory Service Encounters By Type Of Service And Type Of Provider

Exhibits 49 through 52 present cross-tabulations of service encounters by service and personnel type for the baseline and demonstration periods. Both row and column percentages are reported to facilitate an examination of the distribution of (1) providers for a given service and (2) services provided by a given type of personnel. Highlights of the findings follow:

Baseline Period--With few exceptions, the types of services provided are consistent with the role traditionally prescribed for the various personnel categories listed. For example, psychiatrists most often provided medication therapy (43 percent), individual therapy (30 percent), and psychiatric (and psychological) exams (19 percent).

Demonstration Period--Changes in the types of services provided by the QMHPs from the baseline to demonstration periods include the following:

- Psychiatrists provided substantially fewer encounters of medication therapy (43 percent to 11 percent) and a substantially greater number of encounters of "other" services, including nonspecified services and consultation (2 percent to 31 percent). These changes reflect their changing supervisory roles, largely as a result of the demonstration.
- QMHP psychologists provided a greater percentage of group therapy encounters (17 percent to 25 percent).
- Psychiatric nurses increased their role in providing individual therapy encounters (21 percent to 52 percent) and psychosocial histories/intakes (2 percent to 8 percent) and decreased their role in providing medication therapy encounters (61 percent to 14 percent).
- Psychiatric social workers continued to provide individual and group therapy as their primary service encounters, but tended to shift more heavily toward individual therapy (54 percent to 66 percent) under the demonstration. This is probably due to greater concentration on elderly beneficiaries in the demonstration, who were more often provided individual therapy encounters.

Changes in the types of services provided by some of the non-QMHPs were also observed:

- Other social workers provided a greater percentage of individual therapy encounters (41 percent to 63 percent), with a corresponding decrease in the percentage of other therapeutic service encounters (16 percent to 0 percent).
- Counselors tended to focus more of their time on group therapy encounters (37 percent to 54 percent) and less of their time in "other" service encounters (11 percent to 0 percent).

Summary

Changes in the patterns of the types of personnel providing services under the demonstration primarily reflect the expansion of the supervisory role to include QMHPs (from physicians only to psychologists, psychiatric social workers, and psychiatric nurses). This was evident by the significant increases in the percentage of beneficiaries receiving services and the

percentage of service encounters provided by psychiatrists, QMHP psychologists, QMHP psychiatric nurses, and QMHP psychiatric social workers. The increased services provided by psychiatric social workers was particularly evident among the elderly and previously untreated populations. The traditional roles of types of personnel in providing mental health services changed dramatically for the QMHPs, as a result of the MMHD guidelines and reimbursement scheme.

EXHIBIT 18

HHS, Office of the Secretary

MOST FREQUENTLY OCCURRING
COMBINATION OF SERVICES--
BASELINE AND DEMONSTRATION

| | PERCENT OF BENEFICIARIES | |
|---|--------------------------|----------------------|
| | <u>BASELINE</u> | <u>DEMONSTRATION</u> |
| 1. Individual Therapy Only | 4.2% | 18.6% |
| 2. Other Only <u>1/</u> | 14.7 | 3.5 |
| 3. Individual Therapy and Other Mental Health Services <u>2/</u> | 12.1 | 13.1 |
| 4. Other Mental Health Services | 10.3 | 11.5 |
| 5. Partial Hospitalization Only | 8.8 | 11.1 |
| 6. Individual Therapy, Medication Therapy and Other Mental Services <u>3/</u> | 6.9 | 2.4 |
| 7. Individual Therapy, Other Mental Health Service, and Other | 2.2 | 4.4 |
| 8. Individual Therapy and Other | 1.4 | 4.4 |
| 9. Medication Therapy Only | 4.4 | 1.2 |
| 10. Individual Therapy and Medication Therapy | <u>3.6</u> | <u>1.1</u> |
| | 68.6% | 71.3% |

1/ Includes Physical Exam, Lab Tests, X-Rays, Other Diagnostic Services, Consultation, Other and Nonspecific Services.

2/ Includes Family Therapy, Marital/Couple Therapy, Alcoholism/Substance Abuse Treatment, Crisis Intervention/Emergency Service, Audiology, Speech Therapy, Occupational Therapy, Other Therapeutic Services, Recreation Therapy, Expressive Arts Therapy, Psychosocial History/Intake, Psychiatric/Psychological Exam.

3/ Includes Medication Therapy, Medication Review, Drugs.

EXHIBIT 19

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES RECEIVING
SPECIFIC SERVICES BY FACILITY TYPE--
BASELINE AND DEMONSTRATION
ALL BENEFICIARIES

| SERVICES | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|--------------------------------|-----------------|---------|---------|-------|------|----------------------|---------|---------|-------|------|
| | ALL | CMHC-OP | CMHC-PH | AMHC | PHP | ALL | CMHC-OP | CMHC-PH | AMHC | PHP |
| NUMBER OF CASES | 3,761 | 1,712 | 364 | 1,237 | 448 | 9,246 | 3,741 | 1,022 | 3,590 | 893 |
| Individual Therapy | 47.6 | 43.5 | 51.7 | 64.0 | 15.4 | 60.1 *** | 57.8 | 38.2 | 78.9 | 39.6 |
| Group Therapy | 15.4 | 16.9 | 37.4 | 11.1 | 3.6 | 19.2 *** | 26.5 | 22.3 | 11.9 | 14.0 |
| Medication Therapy | 35.9 | 38.0 | 56.6 | 37.1 | 7.6 | 14.7 *** | 21.1 | 22.7 | 8.0 | 5.7 |
| Partial Hospitalization | 15.6 | 0.0 | 39.3 | 2.1 | 93.1 | 20.5 *** | 0.4 | 96.5 | 0.0 | 99.9 |
| Other Mental Health Services | 15.2 | 15.5 | 22.8 | 17.9 | 0.2 | 15.8 NS | 23.7 | 10.8 | 12.6 | 1.0 |
| Other Therapeutic Services | 13.3 | 19.2 | 29.4 | 4.0 | 3.1 | 5.6 *** | 1.4 | 5.9 | 8.0 | 12.8 |
| Other Diagnostic Services | 12.3 | 9.3 | 9.3 | 8.7 | 2.5 | 3.4 *** | 6.2 | 2.0 | 0.3 | 6.1 |
| Psychosocial History--Intake | 26.9 | 19.3 | 20.6 | 44.5 | 12.3 | 28.5 * | 28.8 | 16.3 | 36.0 | 11.1 |
| Psychiatric-Psychological Exam | 30.2 | 31.0 | 25.0 | 40.0 | 4.2 | 19.3 *** | 21.1 | 138.0 | 22.7 | 3.9 |
| Other Services | 16.5 | 28.0 | 17.0 | 3.4 | 8.3 | 21.8 ** | 33.8 | 27.7 | 13.1 | 0.0 |

1/ Column totals do not equal 100.0% since clients may receive multiple services.

2 sample z-test for proportion

* p < .05

** p < .01

*** p < .001

EXHIBIT 20

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES RECEIVING
SPECIFIC SERVICES BY FACILITY TYPE--
BASELINE AND DEMONSTRATION
BENEFICIARIES UNDER AGE 65

| SERVICES | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|--------------------------------|-----------------|---------|---------|------|------|----------------------|---------|---------|-------|-------|
| | ALL | CMHC-OP | CMHC-PH | AMHC | PHP | ALL | CMHC-OP | CMHC-PH | AMHC | PHP |
| NUMBER OF CASES | 2,093 | 953 | 214 | 656 | 361 | 4,513 | 2,086 | 559 | 1,174 | 694 |
| Individual Therapy | 46.1 | 46.3 | 58.4 | 62.0 | 13.6 | 55.8 *** | 60.0 | 49.3 | 77.9 | 11.1 |
| Group Therapy | 16.8 | 19.1 | 41.1 | 12.6 | 3.1 | 22.5 ** | 28.9 | 28.8 | 16.7 | 8.2 |
| Medication Therapy | 42.2 | 44.4 | 65.9 | 53.5 | 5.0 | 17.7 *** | 22.3 | 24.5 | 14.9 | 2.9 |
| Partial Hospitalization | 20.6 | 0.0 | 35.5 | 2.3 | 95.0 | 27.5 *** | 0.7 | 95.2 | 0.0 | 100.0 |
| Other Mental Health Services | 17.0 | 19.1 | 27.6 | 20.0 | 0.3 | 20.1 * | 27.4 | 17.2 | 19.8 | 0.7 |
| Other Therapeutic Services | 9.8 | 14.0 | 18.7 | 5.0 | 1.4 | 4.1 *** | 1.2 | 7.9 | 6.3 | 6.2 |
| Other Diagnostic Services | 12.8 | 18.2 | 10.8 | 11.5 | 1.7 | 4.8 *** | 8.3 | 3.4 | 0.3 | 2.7 |
| Psychosocial History--Intake | 21.2 | 16.6 | 25.7 | 32.9 | 12.5 | 23.2 * | 27.1 | 16.8 | 30.0 | 5.3 |
| Psychiatric-Psychological Exam | 31.2 | 34.3 | 29.9 | 44.6 | 3.1 | 20.3 *** | 20.0 | 15.4 | 34.3 | 1.7 |
| Other Services | 19.2 | 30.4 | 23.4 | 5.7 | 8.0 | 29.8 *** | 38.2 | 40.6 | 27.6 | 0.0 |

1/ Column totals do not equal 100.0% since clients may receive multiple services.

2 sample z-test for proportion

* p < .05

** p < .01

*** p < .001

EXHIBIT 21

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES RECEIVING
SPECIFIC SERVICES BY FACILITY TYPE--
BASELINE AND DEMONSTRATION
BENEFICIARIES AGE 65 AND OVER

| SERVICES | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---------------------------------|-----------------|---------|---------|------|------|----------------------|---------|---------|-------|------|
| | ALL | CMHC-OP | CMHC-PI | AMHC | PHP | ALL | CMHC-OP | CMHC-PI | AMHC | PHP |
| NUMBER OF CASES | 1,668 | 759 | 150 | 682 | 87 | 4,733 | 1,655 | 463 | 2,416 | 199 |
| Individual Therapy | 49.6 | 39.9 | 42.0 | 65.6 | 23.0 | 64.2*** | 55.0 | 24.6 | 79.4 | 48.7 |
| Group Therapy | 13.5 | 14.1 | 32.0 | 9.8 | 5.8 | 16.0 * | 23.4 | 14.5 | 9.6 | 34.0 |
| Medication Therapy | 27.9 | 30.0 | 43.3 | 23.4 | 18.4 | 11.9 *** | 19.5 | 20.5 | 4.7 | 15.6 |
| Partial Hospitalization | 9.2 | 0.0 | 44.7 | 1.9 | 85.1 | 13.8 *** | 0.1 | 98.1 | 0.0 | 99.5 |
| Other Mental Health Services | 12.9 | 11.1 | 16.0 | 16.1 | 0.0 | 11.6 NS | 19.0 | 3.0 | 9.1 | 2.0 |
| Other Therapeutic Services | 17.6 | 25.7 | 44.7 | 3.3 | 10.3 | 6.9 *** | 1.6 | 3.5 | 8.8 | 35.7 |
| Other Diagnostic Services | 11.7 | 18.1 | 7.3 | 6.3 | 5.8 | 2.2 *** | 3.5 | 0.2 | 0.3 | 17.6 |
| Psychosocial History--Intake | 34.0 | 22.8 | 13.3 | 54.2 | 11.5 | 33.5 *** | 30.8 | 15.8 | 38.9 | 31.1 |
| Psychiatric--Psychological Exam | 28.8 | 26.9 | 18.0 | 35.9 | 9.2 | 18.3 *** | 22.6 | 11.9 | 17.1 | 11.6 |
| Other Services | 13.1 | 24.9 | 8.0 | 1.5 | 9.2 | 14.1 *** | 28.2 | 12.1 | 6.0 | 0.0 |

1/ Column totals do not equal 100.0% since clients may receive multiple services.

2 sample z-test for proportion

* p < .05

** p < .01

*** p < .001

EXHIBIT 22

IHS, Office of the Secretary

PERCENT OF BENEFICIARIES RECEIVING
SPECIFIC SERVICES BY FACILITY TYPE--
BASELINE AND DEMONSTRATION
BENEFICIARIES WITH NO PREVIOUS TREATMENT

| SERVICES | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|--------------------------------|-----------------|---------|---------|------|------|----------------------|---------|---------|-------|-------|
| | ALL | CMHC-OP | CMHC-PH | AMHC | PHP | ALL | CMHC-OP | CMHC-PH | AMHC | PHP |
| NUMBER OF CASES | 673 | 353 | 54 | 244 | 22 | 2,737 | 1,012 | 177 | 1,451 | 97 |
| Individual Therapy | 52.7 | 47.0 | 42.6 | 66.0 | 22.7 | 66.5 *** | 45.2 | 23.1 | 79.8 | 52.6 |
| Group Therapy | 16.6 | 19.8 | 29.6 | 9.8 | 9.1 | 17.1 * | 22.8 | 12.4 | 12.1 | 40.2 |
| Medication Therapy | 28.3 | 31.2 | 35.2 | 23.0 | 22.7 | 9.8 *** | 16.8 | 2.5 | 2.6 | 17.5 |
| Partial Hospitalization | 7.7 | 0.0 | 44.4 | 2.9 | 95.5 | 9.8 *** | 0.2 | 96.1 | 0.0 | 100.0 |
| Other Mental Health Services | 16.5 | 14.5 | 16.7 | 21.0 | 0.0 | 14.1 NS | 19.7 | 9.0 | 11.4 | 5.2 |
| Other Therapeutic Services | 12.5 | 10.5 | 64.8 | 3.3 | 18.2 | 8.8 NS | 1.9 | 6.2 | 11.9 | 41.2 |
| Other Diagnostic Services | 9.4 | 10.2 | 5.6 | 9.4 | 4.6 | 2.0 *** | 3.3 | 0.6 | 0.1 | 19.6 |
| Psychosocial History--Intake | 40.0 | 32.0 | 14.8 | 59.0 | 18.2 | 38.0 NS | 37.2 | 21.5 | 41.0 | 32.0 |
| Psychiatric-Psychological Exam | 36.6 | 37.1 | 27.8 | 40.0 | 13.6 | 19.8 *** | 23.1 | 20.3 | 18.3 | 7.2 |
| Other Services | 12.9 | 23.0 | 3.7 | 1.6 | 0.0 | 9.8 *** | 18.7 | 9.0 | 4.3 | 0.0 |

1/ Column totals do not equal 100.0% since clients may receive multiple services.

2 sample z-test for proportion

* p <.05

** p <.01

*** p <.001

EXHIBIT 23

IHS, Office of the Secretary PERCENT OF BENEFICIARIES RECEIVING SPECIFIC SERVICES BY FACILITY TYPE-- BASELINE AND DEMONSTRATION BENEFICIARIES WITH SOME PREVIOUS TREATMENT

| SERVICES | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|--------------------------------|-----------------|---------|---------|------|------|----------------------|---------|---------|-------|-------|
| | ALL | CMHC-OP | CMHC-PH | AMHC | PHP | ALL | CMHC-OP | CMHC-PH | AMHC | PHP |
| NUMBER OF CASES | 2,454 | 1,039 | 243 | 784 | 388 | 5,037 | 2,212 | 586 | 1,551 | 688 |
| Individual Therapy | 46.8 | 48.6 | 63.0 | 57.3 | 14.2 | 57.2 *** | 59.8 | 49.8 | 78.3 | 8.0 |
| Group Therapy | 16.3 | 18.9 | 47.7 | 10.2 | 2.3 | 21.4 NS | 30.7 | 32.8 | 21.1 | 4.4 |
| Medication Therapy | 43.9 | 46.6 | 65.8 | 52.2 | 6.4 | 19.0 *** | 24.2 | 28.5 | 14.6 | 3.8 |
| Partial Hospitalization | 18.7 | 0.0 | 33.3 | 2.3 | 93.0 | 24.8 *** | 0.2 | 95.2 | 0.0 | 100.0 |
| Other Mental Health Services | 15.0 | 17.5 | 26.3 | 15.3 | 0.3 | 18.3 NS | 26.6 | 13.1 | 16.4 | 0.3 |
| Other Therapeutic Services | 9.6 | 13.4 | 23.1 | 4.3 | 1.8 | 3.2 *** | 0.9 | 7.2 | 5.5 | 2.0 |
| Other Diagnostic Services | 10.7 | 15.8 | 9.1 | 8.6 | 2.3 | 4.0 *** | 7.6 | 2.7 | 0.6 | 0.9 |
| Psychosocial History--Intake | 23.2 | 17.2 | 25.9 | 35.6 | 12.6 | 22.5 *** | 24.3 | 20.3 | 30.0 | 1.7 |
| Psychiatric-Psychological Exam | 28.5 | 29.1 | 23.5 | 41.8 | 3.1 | 20.3 * | 21.6 | 11.8 | 30.5 | 0.2 |
| Other Services | 20.7 | 36.4 | 23.1 | 5.1 | 8.8 | 30.4 *** | 41.9 | 36.9 | 25.1 | 0.0 |

1/ Column totals do not equal 100.0% since clients may receive multiple services.

2 sample z-test for proportion

* p < .05

** p < .01

*** p < .001

IHS, Office of the Secretary

DISTRIBUTION OF AMBULATORY SERVICE ENCOUNTERS BY SERVICE
TYPE, BY FACILITY TYPE--BASELINE AND DEMONSTRATION
ALL BENEFICIARIES

| Service Type | Baseline Period | | | | | Demonstration Period | | | | |
|---------------------------------|-----------------|--------------|--------------|--------|-------|----------------------|--------------|--------------|--------|--------|
| | All | CMHC-- OP | CMHC-- PH | AMHC | PIHP | All | CMHC-- OP | CMHC-- PH | AMHC | PIHP |
| NUMBER OF ENCOUNTERS | 79,883 | 35,004 | 17,483 | 24,036 | 3,360 | 132,158 | 52,973 | 16,332 | 50,177 | 12,676 |
| PERCENT | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Individual Therapy | 32.6 | 30.5 | 26.3 | 41.0 | 27.5 | 47.7 | 38.3 | 37.8 | 60.4 | 49.5 |
| Group Therapy | 18.9 | 18.4 | 35.5 | 8.3 | 14.8 | 23.9 | 25.0 | 29.6 | 15.1 | 46.4 |
| Medication Therapy | 22.7 | 21.7 | 13.4 | 32.0 | 15.4 | 6.5 | 8.9 | 7.7 | 5.0 | 1.2 |
| Other Mental Health Services | 3.1 | 3.4 | 2.3 | 3.6 | 0.0 | 3.0 | 4.2 | 2.4 | 2.7 | 0.3 |
| Other Therapeutic Services | 7.0 | 8.7 | 10.8 | 1.9 | 6.7 | 0.5 | 0.1 | 0.2 | 1.2 | 0.0 |
| Other Diagnostic Services | 2.2 | 4.0 | 1.2 | 0.6 | 0.7 | 0.3 | 0.7 | 0.2 | 0.0 | 0.2 |
| Psychosocial History--Intake | 1.7 | 1.3 | 0.7 | 2.8 | 2.0 | 2.6 | 2.5 | 1.4 | 3.3 | 2.0 |
| Psychiatric--Psychological Exam | 3.4 | 1.9 | 0.9 | 7.8 | 0.7 | 3.5 | 2.8 | 1.6 | 5.6 | 0.3 |
| Other Services | 8.4 | 10.2 | 8.9 | 2.0 | 32.2 | 11.9 | 17.6 | 19.0 | 6.5 | 0.0 |
| Chi-square test of independence | | | | | | *** | *** | *** | *** | *** |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

DISTRIBUTION OF AMBULATORY SERVICE ENCOUNTERS BY SERVICE
TYPE, BY FACILITY TYPE--BASELINE AND DEMONSTRATION
BENEFICIARIES UNDER 65

| Service Type | Baseline Period | | | | Demonstration Period | | | |
|---------------------------------|-----------------|---------------------|---------------------|-------------|----------------------|---------------------|-------------|-----------|
| | <u>ALL</u> | <u>CMHC- OP</u> | <u>CMHC- PH</u> | <u>AMHC</u> | <u>PH</u> | <u>CMHC- OP</u> | <u>AMHC</u> | <u>PH</u> |
| NUMBER OF ENCOUNTERS | 46,717 | 20,912 | 9,464 | 13,737 | 2,604 | 68,085 | 32,160 | 11,335 |
| PERCENT | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Individual Therapy | 30.0 | 29.6 | 25.7 | 33.2 | 31.2 | 39.7 | 35.4 | 34.1 |
| Group Therapy | 16.7 | 17.1 | 30.7 | 6.3 | 17.5 | 24.9 | 24.9 | 28.8 |
| Medication Therapy | 28.8 | 26.9 | 19.7 | 41.1 | 12.3 | 8.6 | 10.6 | 7.5 |
| Other Mental Health Services | 3.3 | 3.6 | 3.3 | 3.4 | 0.0 | 3.7 | 4.2 | 3.1 |
| Other Therapeutic Services | 4.8 | 7.2 | 4.7 | 1.4 | 4.7 | 0.2 | 0.2 | 0.3 |
| Other Diagnostic Services | 2.2 | 3.6 | 1.9 | 0.7 | 0.6 | 0.5 | 0.9 | 0.2 |
| Psychosocial History--Intake | 1.4 | 1.1 | 1.1 | 1.8 | 2.1 | 2.1 | 2.2 | 1.1 |
| Psychiatric-Psychological Exam | 4.0 | 2.1 | 1.4 | 9.2 | 0.7 | 4.2 | 2.7 | 1.5 |
| Other Services | 8.8 | 8.8 | 11.5 | 2.9 | 30.9 | 16.2 | 18.8 | 23.4 |
| Chi-square test of independence | *** | *** | *** | *** | *** | *** | *** | *** |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

DISTRIBUTION OF AMBULATORY SERVICE ENCOUNTERS BY SERVICE
TYPE, BY FACILITY TYPE--BASELINE AND DEMONSTRATION
BENEFICIARIES OVER 65

| Service Type | Baseline Period | | | | | Demonstration Period | | | | |
|---------------------------------|-----------------|-------------|-------------|-------|------|----------------------|-------------|-------------|--------|-------|
| | All | CMHC- OP | CMHC- PH | AMHC | PHIP | All | CMHC- OP | CMHC- PH | AMHC | PHIP |
| NUMBER OF ENCOUNTERS | 32,242 | 13,738 | 7,990 | 9,777 | 737 | 58,626 | 19,689 | 4,767 | 26,967 | 7,203 |
| PERCENT | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Individual Therapy | 36.4 | 32.0 | 27.1 | 51.9 | 12.9 | 55.1 | 42.7 | 46.1 | 66.2 | 53.3 |
| Group Therapy | 22.5 | 20.5 | 41.3 | 11.1 | 5.6 | 24.0 | 25.9 | 32.9 | 16.0 | 43.0 |
| Medication Therapy | 13.6 | 13.7 | 5.6 | 19.1 | 26.6 | 4.3 | 6.3 | 8.0 | 3.1 | 1.0 |
| Other Mental Health Services | 2.7 | 3.1 | 1.0 | 3.9 | 0.0 | 2.3 | 3.8 | 0.9 | 2.1 | 0.1 |
| Other Therapeutic Services | 10.3 | 11.0 | 18.0 | 2.7 | 14.1 | 1.0 | 0.0 | 0.1 | 2.1 | 0.0 |
| Other Diagnostic Services | 2.2 | 4.5 | 0.4 | 0.6 | 0.5 | 0.2 | 0.4 | 0.0 | 0.0 | 0.2 |
| Psychosocial History--Intake | 2.0 | 1.6 | 0.2 | 4.1 | 1.6 | 3.2 | 2.8 | 1.8 | 3.9 | 2.0 |
| Psychiatric-Psychological Exam | 2.6 | 1.7 | 0.4 | 5.9 | 0.9 | 2.8 | 2.8 | 1.7 | 3.6 | 0.4 |
| Other Services | 7.7 | 12.0 | 5.9 | 0.8 | 37.7 | 7.2 | 15.3 | 8.5 | 3.0 | 0.0 |
| Chi-square test of independence | | | | | | *** | *** | *** | *** | *** |

* p < .05

** p < .01

*** p < .001

IHS, Office of the Secretary

DISTRIBUTION OF AMBULATORY SERVICE ENCOUNTERS BY SERVICE
TYPE, BY FACILITY TYPE--BASELINE AND DEMONSTRATION
BENEFICIARIES WITH NO PREVIOUS MENTAL HEALTH TREATMENT

| Service Type | Baseline Period | | | | | Demonstration Period | | | | |
|---------------------------------|-----------------|--------------|--------------|-------|------|----------------------|--------------|--------------|--------|-------|
| | All | CMHC-- OP | CMHC-- PH | AMHC | PHP | All | CMHC-- OP | CMHC-- PH | AMHC | PHP |
| NUMBER OF ENCOUNTERS | 12,241 | 6,238 | 1,982 | 3,755 | 266 | 33,210 | 10,522 | 1,499 | 16,622 | 4,567 |
| PERCENT | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Individual Therapy | 35.2 | 34.3 | 22.1 | 45.2 | 11.7 | 58.5 | 46.4 | 46.6 | 69.2 | 51.1 |
| Group Therapy | 19.1 | 17.4 | 35.6 | 13.9 | 7.5 | 23.1 | 25.0 | 20.7 | 15.7 | 46.4 |
| Medication Therapy | 16.6 | 16.1 | 9.0 | 19.4 | 44.7 | 2.9 | 5.8 | 9.4 | 1.1 | 0.3 |
| Other Mental Health Services | 4.4 | 5.8 | 2.4 | 3.5 | 0.0 | 3.2 | 4.9 | 7.5 | 2.6 | 0.1 |
| Other Therapeutic Services | 8.0 | 3.8 | 29.0 | 2.0 | 33.1 | 0.8 | 0.1 | 1.2 | 1.4 | 0.0 |
| Other Diagnostic Services | 1.7 | 2.6 | 0.4 | 0.9 | 0.0 | 0.1 | 0.4 | 0.0 | 0.0 | 0.1 |
| Psychosocial History--Intake | 2.7 | 2.5 | 0.6 | 4.0 | 2.3 | 3.8 | 4.1 | 3.1 | 4.2 | 1.7 |
| Psychiatric--Psychological Exam | 3.9 | 1.6 | 1.0 | 9.6 | 0.8 | 3.3 | 3.6 | 4.3 | 3.9 | 0.2 |
| Other Services | 8.5 | 15.9 | 0.0 | 1.5 | 0.0 | 4.4 | 9.7 | 7.9 | 2.0 | 0.0 |
| Chi-square test of independence | | | | | | *** | *** | *** | *** | *** |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

DISTRIBUTION OF AMBULATORY SERVICE ENCOUNTERS BY SERVICE
TYPE, BY FACILITY TYPE--BASELINE AND DEMONSTRATION
BENEFICIARIES WITH PREVIOUS MENTAL HEALTH TREATMENT

| Service Type | Baseline Period | | | | Demonstration Period | | | | | |
|---------------------------------|-----------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|--------|-------|
| | All | CMHC- OP | CMHC- PH | AMHC PHIP | All | CMHC- OP | CMHC- PH | AMHC PHIP | | |
| NUMBER OF ENCOUNTERS | 59,036 | 24,824 | 14,892 | 16,476 | 2,844 | 76,334 | 36,657 | 13,110 | 24,214 | 2,353 |
| PERCENT | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Individual Therapy | 30.7 | 30.8 | 27.4 | 34.0 | 28.9 | 41.5 | 36.0 | 36.4 | 52.2 | 46.0 |
| Group Therapy | 19.4 | 18.7 | 36.6 | 5.7 | 15.6 | 24.1 | 26.2 | 32.9 | 14.0 | 45.8 |
| Medication Therapy | 25.9 | 24.6 | 13.3 | 41.5 | 13.7 | 8.8 | 9.9 | 7.8 | 7.9 | 5.7 |
| Other Mental Health Services | 2.4 | 2.4 | 1.6 | 3.5 | 0.0 | 3.1 | 3.7 | 1.7 | 3.3 | 1.1 |
| Other Therapeutic Services | 6.3 | 8.5 | 8.1 | 1.6 | 4.9 | 0.1 | 0.1 | 0.1 | 0.2 | 0.0 |
| Other Diagnostic Services | 1.9 | 3.3 | 1.2 | 0.5 | 0.6 | 0.4 | 0.8 | 0.2 | 0.0 | 0.0 |
| Psychosocial History--Intake | 1.3 | 1.0 | 0.7 | 2.1 | 2.1 | 1.9 | 1.8 | 1.2 | 2.5 | 1.3 |
| Psychiatric-Psychological Exam | 3.3 | 1.1 | 0.8 | 8.5 | 0.7 | 3.9 | 2.5 | 1.0 | 8.1 | 0.0 |
| Other Services | 8.8 | 9.1 | 10.3 | 2.6 | 33.5 | 16.0 | 18.9 | 18.7 | 11.7 | 0.0 |
| Chi-square test of independence | | | | | | *** | *** | *** | *** | *** |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

NUMBER OF ENCOUNTERS OF AMBULATORY SERVICES
PER BENEFICIARY BY BENEFICIARY GROUP, BY
FACILITY TYPE--BASELINE AND DEMONSTRATION
ALL BENEFICIARIES

| | Baseline Period | | | | | | Demonstration Period | | | | | |
|--|-----------------|-------|----------|-------|----------|-------|----------------------|-------|----------|-------|----------|-------|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| ALL | 11.5 | 1,135 | 12.2 | 1,278 | 13.0 | 1,425 | 13.0 | 1,789 | 5.9 | 2,880 | 7.4 | 3,730 |
| CRHC-OP | 12.5 | 444 | 13.9 | 495 | 16.0 | 544 | 14.7 | 642 | 5.8 | 1,357 | 7.0 | 1,668 |
| CRHC-PH | 23.2 | 150 | 23.1 | 167 | 24.8 | 168 | 21.0 | 197 | 8.6 | 245 | 12.7 | 318 |
| AMHC | 7.6 | 505 | 7.8 | 571 | 7.8 | 655 | 7.5 | 841 | 5.1 | 1,208 | 5.8 | 1,570 |
| PHP | 4.5 | 36 | 7.8 | 45 | 8.7 | 58 | 20.0 | 109 | 12.4 | 70 | 26.8 | 74 |
| | | | | | | | | | | | | |
| Beneficiaries Receiving Baseline Services Only | 9.0 | 195 | 11.4 | 211 | 10.3 | 228 | 10.4 | 287 | | | | |
| CRHC-OP | 8.0 | 101 | 14.1 | 103 | 11.2 | 101 | 11.2 | 116 | | | | |
| CRHC-PH | * | * | * | * | * | * | * | * | | | | |
| AMHC | 6.9 | 77 | 6.6 | 87 | 6.0 | 107 | 7.7 | 141 | | | | |
| PHP | * | * | * | * | * | * | * | * | | | | |
| | | | | | | | | | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | 5.5 | 1,290 | 6.9 | 2,030 |
| CRHC-OP | | | | | | | | | 5.1 | 581 | 6.1 | 909 |
| CRHC-PH | | | | | | | | | 7.1 | 83 | 10.6 | 126 |
| AMHC | | | | | | | | | 4.9 | 592 | 5.6 | 958 |
| PHP | | | | | | | | | 18.6 | 34 | 47.9 | 37 |
| | | | | | | | | | | | | |
| Beneficiaries Receiving Baseline and Demonstration Services | 17.7 | 640 | 12.4 | 1,067 | 13.5 | 1,197 | 13.5 | 1,502 | 6.3 | 1,590 | 8.0 | 1,700 |
| CRHC-OP | 13.9 | 343 | 13.9 | 392 | 17.2 | 443 | 14.6 | 526 | 6.4 | 776 | 8.1 | 859 |
| CRHC-PH | 22.6 | 136 | 23.0 | 152 | 23.5 | 155 | 19.0 | 185 | 9.3 | 162 | 14.0 | 192 |
| AMHC | 7.8 | 428 | 15.3 | 484 | 8.2 | 548 | 9.2 | 700 | 5.4 | 616 | 6.1 | 612 |
| PHP | 4.8 | 33 | 8.7 | 39 | 9.1 | 51 | 7.8 | 91 | 6.5 | 36 | 5.6 | 37 |

* < 20 Cases

IHS, Office of the Secretary

NUMBER OF ENCOUNTERS OF AMBULATORY SERVICES
PER BENEFICIARY BY BENEFICIARY GROUP, BY
FACILITY TYPE--BASELINE AND DEMONSTRATION
BENEFICIARIES UNDER AGE 65

| | Baseline Period | | | | | | Demonstration Period | | | | | |
|---|-----------------|-----|----------|-----|----------|-----|----------------------|-------|----------|-------|----------|-------|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| All | 11.3 | 739 | 12.2 | 812 | 13.1 | 881 | 13.3 | 1,045 | 6.2 | 1,467 | 7.9 | 1,898 |
| CMHC-OP | 12.4 | 301 | 13.7 | 387 | 15.8 | 347 | 14.3 | 381 | 6.2 | 796 | 7.5 | 1,033 |
| CMHC-PH | 17.6 | 111 | 17.9 | 118 | 20.2 | 118 | 20.0 | 138 | 8.0 | 166 | 11.4 | 221 |
| AMHC | 8.5 | 296 | 8.9 | 332 | 8.7 | 372 | 9.1 | 443 | 5.7 | 468 | 6.3 | 608 |
| PHP | 5.1 | 30 | 9.6 | 35 | 10.1 | 44 | 19.7 | 83 | 4.6 | 37 | 24.2 | 36 |
| | | | | | | | | | | | 65.8 | 19 |
| | | | | | | | | | | | 8.4 | 2,065 |
| | | | | | | | | | | | 6.9 | 1,111 |
| | | | | | | | | | | | 12.3 | 266 |
| | | | | | | | | | | | 8.3 | 672 |
| | | | | | | | | | | | * | * |
| Beneficiaries Receiving Baseline Services Only | 11.2 | 102 | 13.7 | 106 | 13.7 | 109 | 14.2 | 124 | | | | |
| CMHC-OP | 8.3 | 59 | 13.0 | 62 | 12.3 | 55 | 12.7 | 56 | | | | |
| CMHC-PH | * | * | * | * | * | * | * | * | | | | |
| AMHC | 8.9 | 28 | 9.8 | 29 | 7.5 | 40 | 7.7 | 47 | | | | |
| PHP | * | * | * | * | * | * | * | * | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | 5.7 | 513 | 7.8 | 835 |
| CMHC-OP | | | | | | | | | 5.8 | 317 | 6.8 | 489 |
| CMHC-PH | | | | | | | | | 7.8 | 59 | 6.8 | 83 |
| AMHC | | | | | | | | | 4.5 | 123 | 11.4 | 249 |
| PHP | | | | | | | | | * | * | * | * |
| | | | | | | | | | | | 8.1 | 1,083 |
| | | | | | | | | | | | 6.3 | 603 |
| | | | | | | | | | | | 11.1 | 109 |
| | | | | | | | | | | | 7.4 | 356 |
| | | | | | | | | | | | * | * |
| | | | | | | | | | | | 8.4 | 1,113 |
| | | | | | | | | | | | 6.3 | 617 |
| | | | | | | | | | | | 12.2 | 129 |
| | | | | | | | | | | | 8.6 | 357 |
| | | | | | | | | | | | * | * |
| Beneficiaries Receiving Baseline and Demonstration Services | 11.3 | 631 | 11.9 | 706 | 13.0 | 772 | 13.1 | 920 | 6.5 | 954 | 7.9 | 1,063 |
| CMHC-OP | 13.4 | 242 | 13.8 | 265 | 16.4 | 292 | 14.6 | 325 | 6.5 | 479 | 8.1 | 544 |
| CMHC-PH | 15.8 | 98 | 16.7 | 105 | 17.4 | 107 | 19.0 | 127 | 8.1 | 107 | 11.4 | 138 |
| AMHC | 8.1 | 269 | 8.8 | 303 | 8.8 | 332 | 9.2 | 396 | 6.1 | 345 | 6.7 | 359 |
| PHP | 5.1 | 28 | 9.8 | 33 | 10.6 | 41 | 17.8 | 72 | 5.3 | 23 | 3.1 | 22 |
| | | | | | | | | | | | * | * |
| | | | | | | | | | | | 8.4 | 952 |
| | | | | | | | | | | | 7.5 | 494 |
| | | | | | | | | | | | 12.4 | 137 |
| | | | | | | | | | | | 8.0 | 315 |
| | | | | | | | | | | | * | * |

* < 20 Cases

HHS, Office of the Secretary

NUMBER OF ENCOUNTERS OF AMBULATORY SERVICES
PER BENEFICIARY BY BENEFICIARY GROUP, BY
FACILITY TYPE--BASELINE AND DEMONSTRATION
BENEFICIARIES AGE 65 AND OVER

| | Baseline Period | | | | | | Demonstration Period | | | | | |
|--|-----------------|-----|----------|-----|----------|-----|----------------------|-----|----------|-------|----------|-------|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| All | 11.9 | 396 | 12.3 | 466 | 12.9 | 544 | 12.7 | 744 | 5.6 | 1,413 | 6.9 | 1,832 |
| CMHC-OP | 12.8 | 143 | 14.5 | 168 | 16.6 | 197 | 15.2 | 261 | 5.3 | 561 | 6.5 | 735 |
| CMHC-PI | 39.1 | 39 | 35.6 | 49 | 35.9 | 50 | 43.6 | 59 | 9.7 | 79 | 15.5 | 97 |
| AMHC | 6.5 | 208 | 6.4 | 239 | 6.7 | 283 | 5.9 | 398 | 4.8 | 740 | 5.5 | 962 |
| PIIP | * | * | * | * | * | * | 21.0 | 26 | 21.1 | 33 | 29.2 | 38 |
| | | | | | | | | | | | 48.1 | 24 |
| | | | | | | | | | | | 32.2 | 23 |
| | | | | | | | | | | | | |
| Beneficiaries Receiving Baseline Services Only | 6.6 | 93 | 9.0 | 105 | 7.0 | 119 | 7.3 | 162 | | | | |
| CMHC-OP | 7.6 | 42 | 15.8 | 41 | 9.8 | 46 | 9.7 | 60 | | | | |
| CMHC-PI | * | * | * | * | * | * | * | * | | | | |
| AMHC | 5.7 | 49 | 4.9 | 58 | 5.0 | 67 | 4.0 | 94 | | | | |
| PIIP | * | * | * | * | * | * | * | * | | | | |
| | | | | | | | | | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | | | | |
| CMHC-OP | | | | | | | | | 5.3 | 777 | 6.3 | 1,195 |
| CMHC-PI | | | | | | | | | 4.2 | 264 | 5.2 | 420 |
| AMHC | | | | | | | | | 5.1 | 24 | 9.1 | 43 |
| PIIP | | | | | | | | | 5.0 | 469 | 5.5 | 709 |
| | | | | | | | | | 29.2 | 20 | 42.3 | 23 |
| | | | | | | | | | | | * | * |
| | | | | | | | | | | | | |
| Beneficiaries Receiving Baseline and Demonstration Services | 13.5 | 303 | 13.2 | 361 | 14.4 | 425 | 14.1 | 582 | 6.0 | 636 | 8.1 | 637 |
| CMHC-OP | 14.9 | 101 | 14.0 | 127 | 18.6 | 151 | 16.9 | 201 | 6.2 | 297 | 8.1 | 315 |
| CMHC-PI | 39.9 | 38 | 36.9 | 47 | 37.0 | 48 | 44.2 | 58 | 11.7 | 55 | 20.5 | 54 |
| AMHC | 6.7 | 159 | 6.8 | 181 | 7.1 | 216 | 6.4 | 304 | 4.5 | 271 | 5.4 | 253 |
| PIIP | * | * | * | * | * | * | * | * | * | * | * | * |
| | | | | | | | | | | | * | * |
| | | | | | | | | | | | | |

* < 20 Cases

HHS, Office of the Secretary

NUMBER OF ENCOUNTERS OF AMBULATORY SERVICES
PER BENEFICIARY BY BENEFICIARY GROUP, BY
FACILITY TYPE—BASELINE AND DEMONSTRATION
BENEFICIARIES WITH NO PREVIOUS MENTAL HEALTH TREATMENT

| | Baseline Period | | | | | | Demonstration Period | | | | | |
|---|-----------------|-----|----------|-----|----------|-----|----------------------|-----|----------|-----|----------|-------|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| All | 9.6 | 321 | 11.3 | 221 | 13.2 | 257 | 10.4 | 385 | 5.8 | 884 | 6.8 | 1,189 |
| CMHC-OP | 4.4 | 116 | 11.6 | 101 | 16.6 | 113 | 12.3 | 166 | 5.3 | 315 | 5.7 | 456 |
| CMHC-PH | 14.6 | 48 | * | * | * | * | 24.5 | 25 | 7.1 | 30 | 9.0 | 41 |
| AMHC | 8.5 | 57 | 8.7 | 101 | 8.1 | 126 | 6.0 | 187 | 5.1 | 509 | 5.8 | 664 |
| PHP | 6.0 | 27 | * | * | * | * | * | * | 23.2 | 30 | 44.9 | 28 |
| | | | | | | | | | | | 63.7 | 25 |
| | | | | | | | | | | | 7.7 | 1,170 |
| | | | | | | | | | | | 1.6 | 1,640 |
| | | | | | | | | | | | 7.9 | 58 |
| | | | | | | | | | | | 7.9 | 627 |
| | | | | | | | | | | | * | * |
| Beneficiaries Receiving Baseline Services Only | 9.0 | 195 | 8.5 | 70 | 7.6 | 75 | 8.4 | 109 | | | | |
| CMHC-OP | 7.0 | 61 | 9.0 | 36 | 9.2 | 34 | 9.5 | 49 | | | | |
| CMHC-PH | 7.4 | 34 | * | * | * | * | * | * | | | | |
| AMHC | * | * | 7.3 | 33 | 6.1 | 40 | 4.6 | 57 | | | | |
| PHP | 6.1 | 26 | * | * | * | * | * | * | | | | |
| | | | | | | | | | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | | | | |
| CMHC-OP | | | | | | | | | 5.8 | 580 | 6.7 | 886 |
| CMHC-PH | | | | | | | | | 4.8 | 151 | 5.0 | 280 |
| AMHC | | | | | | | | | * | * | * | * |
| PHP | | | | | | | | | 5.1 | 395 | 5.8 | 568 |
| | | | | | | | | | 23.6 | 26 | 51.5 | 23 |
| | | | | | | | | | | | 64.1 | 23 |
| | | | | | | | | | | | 7.6 | 953 |
| | | | | | | | | | | | 5.0 | 336 |
| | | | | | | | | | | | 6.7 | 39 |
| | | | | | | | | | | | 8.0 | 564 |
| | | | | | | | | | | | * | * |
| Beneficiaries Receiving Baseline and Demonstration Services | | | | | | | | | | | | |
| CMHC-OP | 13.4 | 126 | 12.5 | 151 | 15.4 | 182 | 11.2 | 276 | 5.9 | 304 | 7.1 | 303 |
| CMHC-PH | 14.1 | 55 | 12.9 | 65 | 19.7 | 79 | 13.4 | 117 | 5.8 | 164 | 6.9 | 176 |
| AMHC | 32.0 | 14 | * | * | * | * | 24.5 | 25 | 8.1 | 22 | 10.8 | 26 |
| PHP | 8.3 | 56 | 9.3 | 68 | 9.0 | 86 | 6.6 | 130 | 5.1 | 114 | 6.2 | 96 |
| | * | * | * | * | * | * | * | * | * | * | * | * |
| | | | | | | | | | | | 8.3 | 217 |
| | | | | | | | | | | | 7.6 | 134 |
| | | | | | | | | | | | * | * |
| | | | | | | | | | | | 6.5 | 63 |
| | | | | | | | | | | | * | * |

* < 20 Cases

EXHIBIT 33

IHS, Office of the Secretary

NUMBER OF ENCOUNTERS OF AMBULATORY SERVICES
PER BENEFICIARY BY BENEFICIARY GROUP, BY
FACILITY TYPE--BASELINE AND DEMONSTRATION
BENEFICIARIES WITH PREVIOUS MENTAL HEALTH TREATMENT

| | Baseline Period | | | | | | Demonstration Period | | | | | |
|--|-----------------|-----|----------|-------|----------|-------|----------------------|-------|----------|-------|----------|-------|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| ALL | 11.5 | 948 | 12.4 | 1,057 | 13.0 | 1,168 | 13.7 | 1,404 | 6.0 | 1,996 | 1.7 | 1,541 |
| CMHC-OP | 12.8 | 355 | 14.6 | 394 | 15.9 | 431 | 15.5 | 476 | 2.1 | 3,038 | 7.5 | 1,312 |
| CMHC-PH | 22.3 | 135 | 22.9 | 150 | 24.3 | 152 | 27.5 | 172 | 3.2 | 215 | 13.2 | 277 |
| AMHC | 7.7 | 423 | 7.7 | 470 | 7.8 | 529 | 8.0 | 654 | 5.2 | 699 | 5.8 | 906 |
| PHP | 4.7 | 35 | 7.9 | 43 | 9.1 | 56 | 19.1 | 102 | 4.3 | 40 | 15.7 | 46 |
| Beneficiaries Receiving Baseline Services Only | 9.9 | 134 | 12.8 | 141 | 11.5 | 153 | 11.5 | 178 | | | | |
| CMHC-OP | 8.3 | 67 | 16.8 | 67 | 12.1 | 67 | 12.3 | 67 | | | | |
| CMHC-PH | * | * | * | * | * | * | * | * | | | | |
| AMHC | 7.3 | 51 | 6.0 | 54 | 5.8 | 67 | 5.7 | 84 | | | | |
| PHP | * | * | * | * | * | * | * | * | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | 5.2 | 710 | 7.0 | 1,144 |
| CMHC-OP | | | | | | | | | 5.2 | 430 | 6.5 | 629 |
| CMHC-PH | | | | | | | | | 7.3 | 75 | 11.3 | 111 |
| AMHC | | | | | | | | | 4.5 | 197 | 5.3 | 390 |
| PHP | | | | | | | | | * | * | * | * |
| Beneficiaries Receiving Baseline and Demonstration Services | 11.8 | 814 | 12.3 | 916 | 13.2 | 1,015 | 14.0 | 1,226 | 6.4 | 1,286 | 8.2 | 1,397 |
| CMHC-OP | 13.7 | 288 | 14.1 | 327 | 16.6 | 364 | 16.0 | 409 | 6.5 | 612 | 8.4 | 683 |
| CMHC-PH | 21.5 | 133 | 22.7 | 136 | 22.7 | 140 | 27.3 | 160 | 9.5 | 140 | 14.5 | 166 |
| AMHC | 7.6 | 372 | 7.9 | 416 | 8.0 | 462 | 8.3 | 570 | 5.4 | 502 | 6.1 | 516 |
| PHP | 4.9 | 32 | 8.7 | 37 | 9.2 | 49 | 17.8 | 87 | 4.7 | 32 | 4.2 | 32 |

* < 20 Cases

NUMBER OF AMBULATORY SERVICE ENCOUNTERS PER
BENEFICIARY BY SERVICE TYPE, BY BENEFICIARY GROUP,
BY FACILITY TYPE--BASELINE AND DEMONSTRATION

| | Baseline Period | | | | | | Demonstration Period | | | | | | | | | |
|---|-----------------|------|----------|-----|----------|-------|----------------------|-------|----------|-------|----------|-------|----------|-------|----------|-------|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | | Period 7 | | Period 8 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| Individual Therapy | 6.5 | 79.2 | 6.2 | 903 | 6.1 | 1,047 | 6.9 | 1,268 | 4.8 | 1,999 | 5.7 | 2,829 | 5.5 | 3,204 | 5.8 | 3,243 |
| Beneficiaries Receiving Baseline Services Only | 5.5 | 182 | 5.4 | 220 | 5.6 | 249 | 5.2 | 277 | | | | | | | | |
| GMHC-OP | 4.6 | 84 | 5.3 | 92 | 5.8 | 87 | 5.3 | 95 | | | | | | | | |
| GMHC-PH | 8.0 | 11 | 7.8 | 14 | 13.6 | 13 | 13.0 | 9 | | | | | | | | |
| AMHC | 6.0 | 87 | 5.2 | 109 | 4.8 | 144 | 4.8 | 165 | | | | | | | | |
| PHP | -- | -- | 3.6 | 5 | 3.8 | 5 | 3.7 | 8 | | | | | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | 5.1 | 1,041 | 5.8 | 1,687 | 5.6 | 2,140 | 6.1 | 2,348 |
| GMHC-OP | | | | | | | | | 4.3 | 359 | 5.1 | 547 | 4.8 | 739 | 5.0 | 753 |
| GMHC-PH | | | | | | | | | 6.0 | 43 | 8.5 | 75 | 6.4 | 120 | 6.5 | 137 |
| AMHC | | | | | | | | | 5.0 | 602 | 5.1 | 1,026 | 4.7 | 1,224 | 5.3 | 1,390 |
| PHP | | | | | | | | | 12.3 | 37 | 28.3 | 39 | 31.8 | 57 | 34.0 | 68 |
| Beneficiaries Receiving Baseline and Demonstration Services | 6.8 | 610 | 6.4 | 683 | 6.2 | 798 | 7.4 | 991 | 4.7 | 958 | 5.6 | 1,142 | 5.5 | 1,064 | 5.2 | 895 |
| GMHC-OP | 6.8 | 246 | 6.5 | 286 | 6.5 | 320 | 8.3 | 373 | 4.3 | 371 | 5.5 | 1,172 | 5.2 | 467 | 4.9 | 374 |
| GMHC-PH | 10.3 | 88 | 8.9 | 95 | 7.5 | 109 | 13.6 | 112 | 5.8 | 96 | 10.1 | 128 | 7.1 | 131 | 6.0 | 132 |
| AMHC | 5.6 | 253 | 5.6 | 273 | 5.8 | 327 | 5.2 | 451 | 4.6 | 452 | 4.7 | 515 | 5.3 | 457 | 5.0 | 376 |
| PHP | 5.6 | 23 | 5.5 | 29 | 4.8 | 42 | 6.6 | 55 | 5.8 | 39 | 4.7 | 27 | 10.3 | 9 | 10.4 | 13 |
| Group Therapy | 11.1 | 243 | 13.8 | 266 | 14.4 | 276 | 13.0 | 363 | 5.8 | 778 | 7.5 | 912 | 9.3 | 1,008 | 10.0 | 1,052 |
| Beneficiaries Receiving Baseline Services Only | 8.5 | 35 | 14.9 | 37 | 13.9 | 38 | 11.1 | 45 | | | | | | | | |
| GMHC-OP | 10.0 | 18 | 19.4 | 20 | 13.0 | 24 | 12.8 | 27 | | | | | | | | |
| GMHC-PH | 12.1 | 8 | 8.6 | 8 | 29.6 | 5 | 13.7 | 4 | | | | | | | | |
| AMHC | 2.2 | 9 | 10.6 | 9 | 8.3 | 8 | 7.3 | 13 | | | | | | | | |
| PHP | -- | -- | -- | -- | 3.0 | 1 | 4.0 | 1 | | | | | | | | |

Baseline Period

Demonstration Period

| Group Therapy (continued) | Baseline Period | | | | Demonstration Period | | | |
|---|-----------------|----------|----------|----------|----------------------|----------|----------|----------|
| | Period 1 | Period 2 | Period 3 | Period 4 | Period 5 | Period 6 | Period 7 | Period 8 |
| | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean |
| | N | N | N | N | N | N | N | N |
| Beneficiaries Receiving and Demonstration Services Only | | | | | | | | |
| CMHC-OP | 11.6 | 13.6 | 14.5 | 13.3 | 5.8 | 8.3 | 11.6 | 11.8 |
| CMHC-PH | 10.3 | 10.7 | 12.9 | 11.4 | 4.7 | 5.7 | 7.1 | 5.3 |
| AMHC | 15.7 | 20.8 | 17.9 | 19.5 | 5.4 | 8.7 | 11.8 | 15.9 |
| PHIP | 7.6 | 7.4 | 10.2 | 7.8 | 6.0 | 6.0 | 9.5 | 13.6 |
| | 4.0 | 36.5 | 40.3 | 24.2 | 10.3 | 32.5 | 40.0 | 39.2 |
| | | | | | 39 | 35 | 51 | 50 |
| Beneficiaries Receiving Baseline and Demonstration Services | | | | | | | | |
| CMHC-OP | 11.6 | 13.6 | 14.5 | 13.3 | 5.8 | 8.3 | 11.6 | 11.8 |
| CMHC-PH | 10.3 | 10.7 | 12.9 | 11.4 | 4.7 | 5.7 | 7.1 | 5.3 |
| AMHC | 15.7 | 20.8 | 17.9 | 19.5 | 5.4 | 8.7 | 11.8 | 15.9 |
| PHIP | 7.6 | 7.4 | 10.2 | 7.8 | 6.0 | 6.0 | 9.5 | 13.6 |
| | 4.0 | 36.5 | 40.3 | 24.2 | 10.3 | 32.5 | 40.0 | 39.2 |
| | | | | | 39 | 35 | 51 | 50 |
| Medication Therapy | | | | | | | | |
| Beneficiaries Receiving Baseline Services Only | | | | | | | | |
| CMHC-OP | 11.6 | 13.6 | 14.5 | 13.3 | 5.8 | 8.3 | 11.6 | 11.8 |
| CMHC-PH | 10.3 | 10.7 | 12.9 | 11.4 | 4.7 | 5.7 | 7.1 | 5.3 |
| AMHC | 15.7 | 20.8 | 17.9 | 19.5 | 5.4 | 8.7 | 11.8 | 15.9 |
| PHIP | 7.6 | 7.4 | 10.2 | 7.8 | 6.0 | 6.0 | 9.5 | 13.6 |
| | 4.0 | 36.5 | 40.3 | 24.2 | 10.3 | 32.5 | 40.0 | 39.2 |
| | | | | | 39 | 35 | 51 | 50 |
| Beneficiaries Receiving Baseline and Demonstration Services Only | | | | | | | | |
| CMHC-OP | 11.6 | 13.6 | 14.5 | 13.3 | 5.8 | 8.3 | 11.6 | 11.8 |
| CMHC-PH | 10.3 | 10.7 | 12.9 | 11.4 | 4.7 | 5.7 | 7.1 | 5.3 |
| AMHC | 15.7 | 20.8 | 17.9 | 19.5 | 5.4 | 8.7 | 11.8 | 15.9 |
| PHIP | 7.6 | 7.4 | 10.2 | 7.8 | 6.0 | 6.0 | 9.5 | 13.6 |
| | 4.0 | 36.5 | 40.3 | 24.2 | 10.3 | 32.5 | 40.0 | 39.2 |
| | | | | | 39 | 35 | 51 | 50 |
| Beneficiaries Receiving Baseline and Demonstration Services Only | | | | | | | | |
| CMHC-OP | 11.6 | 13.6 | 14.5 | 13.3 | 5.8 | 8.3 | 11.6 | 11.8 |
| CMHC-PH | 10.3 | 10.7 | 12.9 | 11.4 | 4.7 | 5.7 | 7.1 | 5.3 |
| AMHC | 15.7 | 20.8 | 17.9 | 19.5 | 5.4 | 8.7 | 11.8 | 15.9 |
| PHIP | 7.6 | 7.4 | 10.2 | 7.8 | 6.0 | 6.0 | 9.5 | 13.6 |
| | 4.0 | 36.5 | 40.3 | 24.2 | 10.3 | 32.5 | 40.0 | 39.2 |
| | | | | | 39 | 35 | 51 | 50 |

| | Baseline Period | | | | | | Demonstration Period | | | | | | | | | |
|---|-----------------|-----|----------|-----|----------|-----|----------------------|-----|----------|----|----------|-----|----------|-----|----------|-----|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | | Period 7 | | Period 8 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| <u>Other Mental Health Services</u> | | | | | | | | | | | | | | | | |
| Beneficiaries Receiving Baseline Services Only | | | | | | | | | | | | | | | | |
| CMHC-OP | 2.6 | 42 | 3.8 | 45 | 3.2 | 54 | 2.4 | 71 | | | | | | | | |
| CMHC-PH | 3.1 | 23 | 5.1 | 22 | 4.9 | 19 | 3.8 | 28 | | | | | | | | |
| AMHC | 3.7 | 4 | 5.3 | 6 | 3.3 | 3 | 1.3 | 3 | | | | | | | | |
| PIP | 1.6 | 15 | 1.7 | 1.7 | 2.2 | 32 | 1.5 | 40 | | | | | | | | |
| | -- | -- | -- | -- | -- | -- | -- | -- | | | | | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | | | | | | | | |
| CMHC-OP | | | | | | | | | 1.6 | 78 | 2.0 | 357 | 2.1 | 424 | 2.2 | 407 |
| CMHC-PH | | | | | | | | | 1.5 | 42 | 1.9 | 223 | 1.8 | 272 | 1.9 | 265 |
| AMHC | | | | | | | | | 2.0 | 5 | 1.8 | 22 | 3.5 | 30 | 3.6 | 33 |
| PIP | | | | | | | | | 1.8 | 30 | 2.3 | 106 | 2.2 | 120 | 2.4 | 108 |
| | | | | | | | | | 2.0 | 1 | 3.2 | 6 | 6.0 | 2 | 2.0 | 1 |
| Beneficiaries Receiving Baseline and Demonstration Services | | | | | | | | | | | | | | | | |
| CMHC-OP | 2.4 | 119 | 2.5 | 134 | 3.3 | 135 | 3.4 | 211 | 1.6 | 84 | 2.2 | 196 | 2.1 | 208 | 2.1 | 160 |
| CMHC-PH | 2.5 | 59 | 2.8 | 64 | 2.4 | 65 | 3.1 | 97 | 1.8 | 36 | 2.2 | 103 | 2.0 | 121 | 2.0 | 84 |
| AMHC | 1.9 | 21 | 2.0 | 20 | 4.5 | 15 | 4.9 | 37 | 1.1 | 9 | 1.8 | 15 | 1.7 | 26 | 2.1 | 17 |
| PIP | 2.5 | 39 | 2.5 | 49 | 4.1 | 55 | 3.0 | 77 | 1.6 | 39 | 2.2 | 78 | 2.7 | 61 | 2.1 | 59 |
| | -- | -- | 1.0 | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| <u>Other Therapeutic Services</u> | | | | | | | | | | | | | | | | |
| CMHC-OP | 5.2 | 183 | 6.8 | 188 | 8.6 | 158 | 9.5 | 208 | 5.5 | 21 | 9.2 | 53 | 2.7 | 43 | N/A | N/A |
| Beneficiaries Receiving Baseline Services Only | | | | | | | | | | | | | | | | |
| CMHC-OP | 2.6 | 79 | 3.6 | 84 | 3.7 | 52 | 9.0 | 62 | | | | | | | | |
| CMHC-PH | 2.5 | 72 | 3.5 | 74 | 3.1 | 44 | 5.8 | 49 | | | | | | | | |
| AMHC | 3.0 | 5 | 4.0 | 6 | 7.5 | 4 | 49.0 | 1 | | | | | | | | |
| PIP | 7.0 | 2 | 5.5 | 4 | 6.0 | 4 | 3.8 | 5 | | | | | | | | |
| | -- | -- | -- | -- | -- | -- | 29.5 | 7 | | | | | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | | | | | | | | |
| CMHC-OP | | | | | | | | | 6.0 | 4 | 8.3 | 43 | 2.3 | 36 | N/A | N/A |
| CMHC-PH | | | | | | | | | -- | -- | 9.0 | 1 | 10.0 | 1 | | |
| AMHC | | | | | | | | | -- | -- | -- | -- | -- | -- | | |
| PIP | | | | | | | | | 6.0 | 4 | 8.3 | 42 | 2.1 | 35 | | |
| | | | | | | | | | -- | -- | -- | -- | -- | -- | | |
| Beneficiaries Receiving Baseline and Demonstration Services | | | | | | | | | | | | | | | | |
| CMHC-OP | 7.2 | 104 | 9.5 | 104 | 11.0 | 106 | 9.7 | 146 | 5.4 | 17 | 13.0 | 10 | 4.7 | 7 | N/A | N/A |
| CMHC-PH | 7.3 | 47 | 8.7 | 53 | 10.0 | 57 | 11.0 | 72 | 7.0 | 3 | 13.0 | 1 | 12.0 | 1 | | |
| AMHC | 9.6 | 35 | 13.8 | 30 | 17.7 | 29 | 11.6 | 43 | 2.3 | 4 | 4.5 | 2 | 5.0 | 3 | | |
| PIP | 3.2 | 22 | 5.5 | 20 | 4.4 | 19 | 3.8 | 29 | 6.2 | 10 | 15.4 | 7 | 2.0 | 3 | | |
| | -- | -- | 1.0 | 1 | 1.0 | 1 | 8.5 | 2 | -- | -- | -- | -- | -- | -- | | |

| | Baseline Period | | | | | | Demonstration Period | | | | | |
|---|-----------------|-----|----------|-----|----------|-----|----------------------|-----|----------|-----|----------|-----|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| <u>Other Diagnostic Services</u> | 3.3 | 150 | 3.0 | 143 | 4.8 | 100 | 2.8 | 120 | 1.5 | 86 | 1.5 | 83 |
| Beneficiaries Receiving Baseline Services Only | 3.6 | 92 | 3.6 | 75 | 5.5 | 41 | 3.1 | 49 | | | | |
| CMHC-OP | 3.8 | 76 | 4.0 | 58 | 5.7 | 28 | 3.3 | 41 | | | | |
| CMHC-PI | 9.3 | 3 | 12.5 | 2 | 11.6 | 5 | 4.5 | 2 | | | | |
| AMHC | 1.1 | 12 | 1.0 | 13 | 1.4 | 7 | 1.2 | 5 | | | | |
| PIIP | 1.0 | 1 | 1.0 | 2 | 1.0 | 1 | 1.0 | 1 | | | | |
| <u>Beneficiaries Receiving Demonstration Services Only</u> | | | | | | | | | | | | |
| CMHC-OP | | | | | | | | | 1.4 | 54 | 1.6 | 50 |
| CMHC-PI | | | | | | | | | 1.4 | 52 | 1.6 | 47 |
| AMHC | | | | | | | | | -- | -- | -- | -- |
| PIIP | | | | | | | | | -- | -- | -- | -- |
| Beneficiaries Receiving Baseline and Demonstration Services | 2.8 | 58 | 2.4 | 68 | 4.3 | 59 | 2.6 | 71 | 1.6 | 32 | 1.5 | 33 |
| CMHC-OP | 3.9 | 24 | 3.0 | 37 | 7.7 | 28 | 3.6 | 38 | 1.6 | 30 | 1.5 | 28 |
| CMHC-PI | 6.3 | 6 | 3.6 | 6 | 1.1 | 6 | 1.9 | 10 | 1.5 | 2 | 1.3 | 3 |
| AMHC | 1.2 | 25 | 1.2 | 25 | 1.0 | 23 | 1.1 | 18 | -- | -- | 1.0 | 2 |
| PIIP | 1.0 | 3 | -- | -- | 2.5 | 2 | 1.8 | 5 | -- | -- | -- | -- |
| <u>Psychosocial History--Intake</u> | 1.2 | 192 | 1.2 | 212 | 1.2 | 239 | 1.1 | 460 | 1.1 | 440 | 1.2 | 733 |
| Beneficiaries Receiving Baseline Services Only | 1.2 | 85 | 1.2 | 91 | 1.2 | 94 | 1.2 | 132 | | | | |
| CMHC-OP | 1.4 | 37 | 1.3 | 41 | 1.2 | 35 | 1.4 | 37 | | | | |
| CMHC-PI | 2.0 | 5 | 1.3 | 3 | 2.6 | 3 | 2.8 | 6 | | | | |
| AMHC | 1.0 | 42 | 1.2 | 45 | 1.0 | 54 | 1.0 | 79 | | | | |
| PIIP | 1.0 | 2 | 1.0 | 2 | 1.0 | 2 | 1.2 | 10 | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | 1.1 | 334 | 1.2 | 597 |
| CMHC-OP | | | | | | | | | 1.2 | 95 | 1.2 | 231 |
| CMHC-PI | | | | | | | | | 1.1 | 14 | 1.5 | 38 |
| AMHC | | | | | | | | | 1.0 | 209 | 1.1 | 300 |
| PIIP | | | | | | | | | 2.0 | 16 | 1.6 | 28 |
| Beneficiaries Receiving Baseline and Demonstration Services | 1.1 | 107 | 1.1 | 121 | 1.2 | 145 | 1.1 | 328 | 1.1 | 106 | 1.1 | 136 |
| CMHC-OP | 1.1 | 29 | 1.2 | 45 | 1.4 | 48 | 1.2 | 79 | 1.1 | 30 | 1.1 | 64 |
| CMHC-PI | 1.1 | 16 | 1.0 | 17 | 1.4 | 10 | 1.2 | 27 | 1.0 | 3 | 1.4 | 14 |
| AMHC | 1.2 | 56 | 1.2 | 52 | 1.1 | 83 | 1.0 | 195 | 1.1 | 73 | 1.0 | 57 |
| PIIP | 1.0 | 6 | 1.0 | 7 | 1.0 | 4 | 1.2 | 27 | -- | -- | 2.0 | 1 |
| Beneficiaries Receiving Baseline and Demonstration Services | | | | | | | | | 1.2 | 780 | 1.2 | 780 |
| CMHC-OP | | | | | | | | | 1.1 | 299 | 1.1 | 299 |
| CMHC-PI | | | | | | | | | 1.2 | 53 | 1.1 | 50 |
| AMHC | | | | | | | | | 1.2 | 395 | 1.2 | 377 |
| PIIP | | | | | | | | | 2.4 | 33 | 2.4 | 34 |
| Beneficiaries Receiving Baseline and Demonstration Services | | | | | | | | | 1.3 | 64 | 1.3 | 64 |
| CMHC-OP | | | | | | | | | 1.3 | 34 | 1.3 | 34 |
| CMHC-PI | | | | | | | | | 1.3 | 9 | 1.4 | 11 |
| AMHC | | | | | | | | | 1.8 | 21 | 1.2 | 15 |
| PIIP | | | | | | | | | -- | -- | -- | -- |

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IHS, Office of the Secretary

NUMBER OF AMBULATORY SERVICE ENCOUNTERS BY
PERSONNEL TYPE, BY BENEFICIARY GROUP, BY FACILITY
TYPE--BASELINE AND DEMONSTRATION

| | Baseline Period | | | | | | Demonstration Period | | | | | |
|---------------------------------------|-----------------|-----|----------|-----|----------|-----|----------------------|-------|----------|-------|----------|-------|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| <u>Psychiatrist</u> | 3.5 | 745 | 3.4 | 829 | 3.4 | 935 | 3.3 | 1,128 | 3.4 | 1,852 | 3.8 | 2,634 |
| Beneficiaries Receiving Baseline | | | | | | | | | | | | |
| Services Only | 3.5 | 131 | 3.5 | 144 | 3.1 | 150 | 3.0 | 161 | | | | |
| CMHC-OP | 3.3 | 82 | 3.4 | 86 | 3.4 | 89 | 3.1 | 101 | | | | |
| CMHC-PH | 5.2 | 9 | 6.1 | 8 | 4.1 | 9 | 2.3 | 6 | | | | |
| AMHC | 3.8 | 38 | 3.3 | 49 | 2.4 | 52 | 2.8 | 50 | | | | |
| PHP | 1.0 | 2 | 1.0 | 1 | - | - | 1.7 | 4 | | | | |
| Beneficiaries Receiving Demonstration | | | | | | | | | | | | |
| Services Only | | | | | | | | | 3.7 | 751 | 4.2 | 1,114 |
| CMHC-OP | | | | | | | | | 3.6 | 492 | 3.7 | 662 |
| CMHC-PH | | | | | | | | | 3.1 | 78 | 3.8 | 131 |
| AMHC | | | | | | | | | 2.3 | 149 | 2.2 | 286 |
| PHP | | | | | | | | | 12.8 | 32 | 30.8 | 35 |
| Beneficiaries Receiving Baseline | 3.4 | 614 | 3.4 | 685 | 3.4 | 785 | 3.3 | 967 | 3.3 | 1,101 | 3.5 | 1,271 |
| and Demonstration Services | | | | | | | | | | | | |
| CMHC-OP | 3.7 | 209 | 3.3 | 239 | 3.3 | 275 | 3.5 | 340 | 3.5 | 618 | 3.5 | 696 |
| CMHC-PH | 5.2 | 69 | 4.8 | 78 | 4.2 | 87 | 4.0 | 121 | 3.6 | 115 | 4.4 | 148 |
| AMHC | 3.0 | 325 | 2.2 | 356 | 3.4 | 407 | 3.0 | 486 | 2.5 | 358 | 3.0 | 409 |
| PHP | 1.6 | 11 | 1.9 | 12 | 2.4 | 16 | 2.2 | 20 | 14.3 | 10 | 4.4 | 18 |
| Non-Psychiatric Physician | 2.3 | 3 | 2.6 | 3 | 1.8 | 10 | 1.8 | 20 | 1.9 | 119 | 2.0 | 170 |
| Beneficiaries Receiving Baseline | - | - | - | - | 2.3 | 3 | 1.3 | 3 | | | | |
| Services Only | | | | | | | | | | | | |
| CMHC-OP | - | - | - | - | 2 | 2 | 1.3 | 3 | | | | |
| CMHC-PH | - | - | - | - | 3 | 1 | - | - | | | | |
| AMHC | - | - | - | - | - | - | - | - | | | | |
| PHP | - | - | - | - | - | - | - | - | | | | |
| Beneficiaries Receiving Demonstration | | | | | | | | | | | | |
| Services Only | | | | | | | | | 1.8 | 50 | 2.4 | 88 |
| CMHC-OP | | | | | | | | | 1.8 | 48 | 2.5 | 82 |
| CMHC-PH | | | | | | | | | 1.0 | 1 | 1.3 | 3 |
| AMHC | | | | | | | | | 1.0 | 1 | 1.7 | 3 |
| PHP | | | | | | | | | - | - | - | - |
| Beneficiaries Receiving Baseline | 2.3 | 3 | 2.6 | 3 | 1.5 | 7 | 1.8 | 17 | 1.9 | 69 | 1.6 | 82 |
| and Demonstration Services - All | | | | | | | | | | | | |
| CMHC-OP | 2.3 | 3 | 2.6 | 3 | 1.2 | 5 | 2.0 | 11 | 2.4 | 25 | 1.8 | 51 |
| CMHC-PH | - | - | - | - | 2.5 | 2 | 1.5 | 4 | 1.7 | 3 | 3.0 | 3 |
| AMHC | - | - | - | - | - | - | 1.0 | 1 | 1.7 | 41 | 1.2 | 28 |
| PHP | - | - | - | - | - | - | 2.0 | 1 | - | - | - | - |

| | Baseline Period | | | | | | Demonstration Period | | | | | |
|--|-----------------|-----|----------|-----|----------|-----|----------------------|-----|----------|-----|----------|-----|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| <u>QMIP Psychologist</u> | 5.4 | 56 | 5.4 | 58 | 4.5 | 80 | 4.5 | 106 | 4.7 | 263 | 5.2 | 339 |
| Beneficiaries Receiving Baseline Services Only | 3.1 | 25 | 3.2 | 26 | 3.0 | 29 | 2.8 | 33 | | | | |
| CMHC-OP | 2.8 | 16 | 3.0 | 21 | 2.3 | 13 | 2.3 | 15 | | | | |
| CMHC-PH | 3.2 | 4 | 3.0 | 1 | 8.5 | 2 | 8.0 | 1 | | | | |
| AMHC | 3.8 | 5 | 4.5 | 4 | 2.7 | 14 | 2.9 | 16 | | | | |
| PHP | - | - | - | - | - | - | 4.3 | 1 | | | | |
| <u>Beneficiaries Receiving Demonstration Services Only</u> | | | | | | | | | 5.2 | 133 | 6.5 | 215 |
| CMHC-OP | | | | | | | | | 2.2 | 39 | 3.9 | 60 |
| CMHC-PH | | | | | | | | | 5.4 | 5 | 8.9 | 8 |
| AMHC | | | | | | | | | 3.3 | 47 | 3.6 | 116 |
| PHP | | | | | | | | | 10.1 | 42 | 21.4 | 31 |
| <u>Beneficiaries Receiving Baseline and Demonstration Services</u> | 7.2 | 31 | 7.1 | 32 | 5.4 | 51 | 5.2 | 73 | 4.2 | 130 | 3.1 | 124 |
| CMHC-OP | 9.1 | 11 | 7.9 | 16 | 8.8 | 18 | 7.3 | 26 | 3.0 | 21 | 4.7 | 14 |
| CMHC-PH | 7.0 | 12 | 10.2 | 5 | 3.4 | 14 | 4.5 | 12 | 9.0 | 3 | 6.7 | 3 |
| AMHC | 5.0 | 8 | 5.0 | 10 | 3.8 | 18 | 3.9 | 34 | 3.1 | 75 | 2.7 | 91 |
| PHP | - | - | 1.0 | 1 | 1.0 | 1 | 1.0 | 1 | 7.2 | 31 | 2.9 | 16 |
| <u>Other Psychologist</u> | 5.2 | 110 | 4.9 | 130 | 5.2 | 172 | 5.8 | 164 | 2.9 | 235 | 3.3 | 286 |
| Beneficiaries Receiving Baseline Services Only | 3.7 | 41 | 4.7 | 49 | 4.4 | 79 | 4.8 | 61 | | | | |
| CMHC-OP | 1.0 | 2 | 5.6 | 5 | 6.7 | 4 | 8.1 | 8 | | | | |
| CMHC-PH | 2.0 | 1 | - | - | - | - | - | - | | | | |
| AMHC | 3.9 | 38 | 4.6 | 44 | 4.3 | 75 | 4.3 | 53 | | | | |
| PHP | - | - | - | - | - | - | - | - | | | | |
| <u>Beneficiaries Receiving Demonstration Only</u> | | | | | | | | | 2.2 | 113 | 2.7 | 158 |
| CMHC-OP | | | | | | | | | 2.1 | 52 | 2.7 | 78 |
| CMHC-PH | | | | | | | | | 3.7 | 10 | 5.1 | 15 |
| AMHC | | | | | | | | | 2.1 | 51 | 2.1 | 65 |
| PHP | | | | | | | | | - | - | - | - |
| <u>Beneficiaries Receiving Baseline and Demonstration Services</u> | 6.0 | 69 | 5.0 | 81 | 5.8 | 93 | 6.5 | 103 | 3.5 | 122 | 4.0 | 128 |
| CMHC-OP | 6.6 | 8 | 4.4 | 9 | 6.2 | 9 | 9.2 | 18 | 4.3 | 40 | 4.4 | 36 |
| CMHC-PH | 4.9 | 10 | 3.8 | 11 | 8.0 | 10 | 10.2 | 9 | 4.1 | 16 | 4.5 | 22 |
| AMHC | 6.4 | 49 | 5.6 | 57 | 5.6 | 72 | 5.4 | 74 | 2.9 | 66 | 3.7 | 70 |
| PHP | 1.0 | 2 | 1.2 | 4 | 1.5 | 2 | 4.0 | 2 | - | - | - | - |

| | Baseline Period | | | | | | Demonstration Period | | | | | |
|---|-----------------|-----|----------|-----|----------|-----|----------------------|-----|----------|-----|----------|-----|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| <u>Psychiatric Nurse</u> | 4.7 | 48 | 4.6 | 54 | 3.7 | 66 | 4.0 | 85 | 3.6 | 65 | 5.8 | 87 |
| Beneficiaries Receiving Baseline Services Only | 4.0 | 7 | 3.8 | 9 | 3.4 | 13 | 2.8 | 14 | | | | |
| GMHC-OP | 4.5 | 4 | 3.4 | 5 | 3.8 | 5 | 3.6 | 6 | | | | |
| GMHC-PH | 3.0 | 1 | 13.0 | 1 | 1.5 | 2 | 1.0 | 1 | | | | |
| AMHC | 3.5 | 2 | 1.6 | 3 | 3.8 | 6 | 2.4 | 7 | | | | |
| PIP | - | - | - | - | - | - | - | - | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | 3.7 | 40 | 6.0 | 59 |
| GMHC-OP | | | | | | | | | 5.3 | 6 | 7.3 | 19 |
| GMHC-PH | | | | | | | | | 4.6 | 5 | 3.1 | 7 |
| AMHC | | | | | | | | | 5.6 | 10 | 10.1 | 14 |
| PIP | | | | | | | | | 1.9 | 19 | 2.6 | 19 |
| Beneficiaries Receiving Baseline and Demonstration Services | 4.8 | 41 | 4.7 | 45 | 3.7 | 53 | 4.2 | 71 | 3.4 | 25 | 5.3 | 28 |
| GMHC-OP | 3.0 | 3 | 2.6 | 5 | 4.0 | 4 | 5.6 | 12 | 2.7 | 19 | 6.2 | 16 |
| GMHC-PH | 6.2 | 4 | 4.4 | 5 | 2.2 | 8 | 3.5 | 11 | 5.5 | 6 | 4.7 | 10 |
| AMHC | 4.8 | 34 | 5.1 | 35 | 4.0 | 41 | 4.0 | 48 | - | - | - | - |
| PIP | - | - | - | - | - | - | - | - | - | - | 1.5 | 2 |
| Other Nurse | 7.1 | 371 | 6.5 | 400 | 6.8 | 454 | 8.9 | 504 | 4.1 | 533 | 4.7 | 701 |
| Beneficiaries Receiving Baseline Services Only | 5.6 | 47 | 5.3 | 58 | 7.5 | 62 | 12.2 | 67 | | | | |
| GMHC-OP | 3.1 | 21 | 3.3 | 23 | 6.8 | 22 | 6.3 | 20 | | | | |
| GMHC-PH | 10.7 | 8 | 10.5 | 9 | 18.8 | 5 | 24.0 | 6 | | | | |
| AMHC | 6.2 | 18 | 5.3 | 25 | 5.8 | 33 | 6.7 | 33 | | | | |
| PIP | - | - | 2.0 | 1 | 15.0 | 2 | 40.8 | 8 | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | 3.6 | 111 | 4.4 | 223 |
| GMHC-OP | | | | | | | | | 3.2 | 51 | 3.8 | 99 |
| GMHC-PH | | | | | | | | | 5.2 | 10 | 5.7 | 29 |
| AMHC | | | | | | | | | 3.6 | 48 | 4.6 | 72 |
| PIP | | | | | | | | | 5.0 | 2 | 4.8 | 23 |
| Beneficiaries Receiving Baseline and Demonstration Services | 7.3 | 324 | 6.7 | 342 | 6.7 | 392 | 8.4 | 437 | 4.2 | 422 | 4.9 | 478 |
| GMHC-OP | 6.5 | 86 | 6.4 | 88 | 7.5 | 107 | 9.7 | 110 | 4.1 | 130 | 5.7 | 173 |
| GMHC-PH | 15.2 | 41 | 11.6 | 36 | 10.0 | 39 | 16.0 | 52 | 4.4 | 18 | 6.4 | 37 |
| AMHC | 6.0 | 193 | 6.0 | 214 | 5.9 | 241 | 6.4 | 259 | 4.2 | 263 | 4.1 | 253 |
| PIP | 3.0 | 4 | 7.5 | 4 | 5.4 | 5 | 8.5 | 16 | 3.7 | 11 | 5.5 | 15 |
| | | | | | | | | | | | 6.0 | 441 |
| | | | | | | | | | | | 6.5 | 86 |
| | | | | | | | | | | | 5.8 | 28 |
| | | | | | | | | | | | 5.5 | 124 |
| | | | | | | | | | | | 10.7 | 55 |
| | | | | | | | | | | | 21.1 | 56 |
| | | | | | | | | | | | 6.2 | 385 |
| | | | | | | | | | | | 6.7 | 131 |
| | | | | | | | | | | | 6.9 | 33 |
| | | | | | | | | | | | 5.6 | 268 |
| | | | | | | | | | | | 4.4 | 9 |
| | | | | | | | | | | | 7.3 | 10 |

| | Baseline Period | | | | | | | | Demonstration Period | | | | | | | |
|---|-----------------|-----|----------|-----|----------|-----|----------|-----|----------------------|-------|----------|-------|----------|-------|----------|-------|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | | Period 7 | | Period 8 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| <u>Psychiatric Social Worker</u> | 5.7 | 200 | 7.4 | 266 | 6.1 | 305 | 6.9 | 470 | 5.7 | 1,123 | 6.3 | 1,725 | 6.1 | 2,056 | 6.3 | 2,192 |
| Beneficiaries Receiving Baseline Services Only | 4.2 | 52 | 4.2 | 60 | 4.0 | 65 | 5.0 | 104 | | | | | | | | |
| CMHC-OP | 4.4 | 27 | 4.3 | 24 | 2.7 | 24 | 6.0 | 26 | | | | | | | | |
| CMHC-PH | 5.3 | 6 | 6.2 | 5 | 20.5 | 2 | 7.0 | 4 | | | | | | | | |
| AMHC | 3.6 | 19 | 3.8 | 27 | 4.1 | 35 | 4.4 | 69 | | | | | | | | |
| PIP | - | - | 4.0 | 4 | 3.0 | 4 | 5.8 | 5 | | | | | | | | |
| Beneficiaries Receiving Baseline and Demonstration Services | | | | | | | | | 5.3 | 665 | 5.7 | 1,228 | 5.8 | 1,591 | 6.1 | 1,819 |
| CMHC-OP | | | | | | | | | 5.4 | 127 | 5.5 | 265 | 6.1 | 371 | 5.2 | 412 |
| CMHC-PH | | | | | | | | | 6.6 | 22 | 7.7 | 47 | 5.9 | 67 | 5.7 | 69 |
| AMHC | | | | | | | | | 5.2 | 516 | 5.5 | 892 | 5.2 | 1,112 | 6.4 | 1,302 |
| PIP | | | | | | | | | - | - | 11.4 | 24 | 16.7 | 41 | 7.6 | 36 |
| Beneficiaries Receiving Baseline and Demonstration Services | 6.2 | 168 | 8.4 | 206 | 6.7 | 240 | 7.5 | 366 | 6.2 | 458 | 7.8 | 497 | 7.0 | 465 | 7.1 | 373 |
| CMHC-OP | 8.1 | 46 | 9.3 | 73 | 7.9 | 92 | 9.1 | 116 | 5.7 | 223 | 7.0 | 231 | 6.9 | 249 | 7.0 | 182 |
| CMHC-PH | 6.4 | 36 | 10.5 | 48 | 7.0 | 30 | 11.4 | 41 | 8.9 | 79 | 12.0 | 86 | 9.2 | 77 | 7.5 | 82 |
| AMHC | 5.0 | 54 | 7.0 | 70 | 6.2 | 98 | 6.0 | 183 | 5.7 | 156 | 6.6 | 179 | 6.0 | 138 | 6.6 | 108 |
| PIP | 4.3 | 12 | 3.7 | 15 | 3.5 | 20 | 3.9 | 26 | - | - | 9.0 | 1 | 20.0 | 1 | 41.0 | 1 |
| <u>Other Social Worker</u> | 14.4 | 136 | 15.4 | 149 | 17.0 | 169 | 16.4 | 220 | 3.5 | 216 | 5.0 | 366 | 4.6 | 420 | 4.6 | 395 |
| Beneficiaries Receiving Baseline Services Only | 7.9 | 53 | 7.9 | 50 | 11.4 | 52 | 7.2 | 55 | | | | | | | | |
| CMHC-OP | 8.7 | 32 | 9.5 | 24 | 9.6 | 20 | 9.6 | 25 | | | | | | | | |
| CMHC-PH | 11.5 | 7 | 9.1 | 10 | 40.3 | 8 | 14.4 | 5 | | | | | | | | |
| AMHC | 4.3 | 13 | 5.1 | 14 | 3.3 | 23 | 3.4 | 25 | | | | | | | | |
| PIP | 1.0 | 1 | 1.0 | 2 | 1.0 | 1 | - | - | | | | | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | 3.8 | 67 | 4.6 | 171 | 4.3 | 240 | 4.5 | 253 |
| CMHC-OP | | | | | | | | | 4.4 | 33 | 4.6 | 114 | 4.5 | 166 | 4.9 | 166 |
| CMHC-PH | | | | | | | | | 8.2 | 6 | 7.2 | 17 | 5.5 | 30 | 5.3 | 35 |
| AMHC | | | | | | | | | 2.1 | 28 | 3.5 | 38 | 2.8 | 44 | 2.1 | 48 |
| PIP | | | | | | | | | - | - | 2.0 | 2 | - | - | 7.3 | 4 |
| Beneficiaries Receiving Baseline and Demonstration Services | 18.5 | 83 | 19.2 | 99 | 19.5 | 117 | 19.5 | 165 | 3.4 | 149 | 5.3 | 195 | 4.9 | 180 | 4.8 | 142 |
| CMHC-OP | 20.0 | 32 | 18.2 | 41 | 18.3 | 47 | 21.6 | 70 | 3.6 | 85 | 5.5 | 129 | 4.5 | 115 | 4.9 | 82 |
| CMHC-PH | 26.3 | 28 | 25.7 | 32 | 31.6 | 33 | 32.1 | 36 | 4.1 | 22 | 6.0 | 42 | 8.2 | 35 | 5.7 | 42 |
| AMHC | 8.0 | 18 | 8.1 | 20 | 6.8 | 31 | 5.7 | 45 | 2.6 | 42 | 3.1 | 22 | 2.6 | 29 | 3.7 | 12 |
| PIP | 2.6 | 5 | 28.3 | 6 | 27.5 | 6 | 21.1 | 14 | - | - | 2.0 | 2 | 1.0 | 1 | 1.3 | 6 |

| | Baseline Period | | | | | | | | Demonstration Period | | | | | | | |
|---|-----------------|----|----------|----|----------|-----|----------|-----|----------------------|-----|----------|-----|----------|-----|----------|-----|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | | Period 7 | | Period 8 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| <u>Counselor</u> | 10.5 | 78 | 13.0 | 87 | 15.2 | 109 | 10.2 | 141 | 3.3 | 315 | 3.7 | 649 | 4.7 | 763 | 5.3 | 813 |
| Beneficiaries Receiving Baseline Services | 11.2 | 25 | 23.3 | 26 | 18.5 | 28 | 19.7 | 30 | | | | | | | | |
| CMHC-OP | 13.0 | 20 | 29.1 | 20 | 20.2 | 25 | 24.0 | 15 | | | | | | | | |
| CMHC-PH | 3.0 | 1 | 1.0 | 1 | 5.0 | 1 | 4.0 | 1 | | | | | | | | |
| AMHC | 4.2 | 4 | 4.6 | 5 | 3.5 | 2 | 2.5 | 7 | | | | | | | | |
| PIP | - | - | - | - | - | - | 30.0 | 7 | | | | | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | 3.1 | 153 | 3.2 | 354 | 4.9 | 455 | 5.7 | 521 |
| CMHC-OP | | | | | | | | | 2.7 | 123 | 2.3 | 279 | 2.7 | 322 | 3.5 | 376 |
| CMHC-PH | | | | | | | | | 5.3 | 4 | 6.3 | 23 | 12.3 | 34 | 17.3 | 46 |
| AMHC | | | | | | | | | 4.9 | 25 | 5.6 | 43 | 7.5 | 62 | 7.4 | 68 |
| PIP | | | | | | | | | 3.0 | 1 | 12.1 | 9 | 13.3 | 37 | 12.8 | 31 |
| Beneficiaries Receiving Baseline and Demonstration Services | 10.2 | 53 | 8.6 | 61 | 14.1 | 81 | 7.6 | 111 | 3.4 | 162 | 4.2 | 295 | 4.3 | 308 | 4.5 | 292 |
| CMHC-OP | 13.0 | 15 | 6.7 | 25 | 27.8 | 30 | 7.8 | 33 | 3.0 | 126 | 3.0 | 220 | 3.3 | 234 | 3.6 | 222 |
| CMHC-PH | 7.7 | 8 | 15.1 | 7 | 9.2 | 8 | 17.2 | 13 | 3.6 | 21 | 9.4 | 44 | 5.6 | 38 | 7.0 | 42 |
| AMHC | 10.3 | 21 | 11.2 | 17 | 6.2 | 25 | 6.0 | 43 | 6.7 | 15 | 4.9 | 30 | 8.8 | 35 | 7.9 | 25 |
| PIP | 7.4 | 9 | 5.0 | 12 | 4.3 | 18 | 5.0 | 22 | - | - | 9.0 | 1 | 39.0 | 1 | 9.3 | 3 |
| <u>Expressive Arts Therapist</u> | - | - | - | - | - | - | - | - | - | - | 6.2 | 14 | 9.3 | 49 | 2.1 | 38 |
| Beneficiaries Receiving Baseline Service | | | | | | | | | | | | | | | | |
| CMHC-OP | | | | | | | | | | | | | 9.3 | 49 | 2.1 | 38 |
| CMHC-PH | | | | | | | | | | | | | | | | |
| AMHC | | | | | | | | | | | | | | | | |
| PIP | | | | | | | | | | | | | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | 6.1 | 14 | 6.2 | 14 | 6.2 | 10 | 2.1 | 35 |
| CMHC-OP | | | | | | | | | | | | | | | | |
| CMHC-PH | | | | | | | | | | | | | | | | |
| AMHC | | | | | | | | | | | | | | | | |
| PIP | | | | | | | | | | | | | | | | |
| Beneficiaries Receiving Baseline and Demonstration Services | | | | | | | | | | | 6.0 | 4 | 6.2 | 10 | 2.1 | 35 |
| CMHC-OP | | | | | | | | | | | | | | | | |
| CMHC-PH | | | | | | | | | | | | | | | | |
| AMHC | | | | | | | | | | | | | | | | |
| PIP | | | | | | | | | | | | | | | | |
| Beneficiaries Receiving Baseline and Demonstration Services | | | | | | | | | | | 15.4 | 7 | 15.4 | 7 | 2.0 | 3 |
| CMHC-OP | | | | | | | | | | | | | | | | |
| CMHC-PH | | | | | | | | | | | | | | | | |
| AMHC | | | | | | | | | | | | | | | | |
| PIP | | | | | | | | | | | | | | | | |

| | Baseline Period | | | | | | Demonstration Period | | | | | |
|---|-----------------|-----|----------|-----|----------|-----|----------------------|-----|----------|----|----------|-----|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| Other | 4.8 | 333 | 6.0 | 321 | 6.2 | 281 | 7.6 | 290 | 4.0 | 93 | 4.5 | 223 |
| Beneficiaries Receiving Baseline Services | 3.9 | 151 | 4.3 | 148 | 3.7 | 97 | 4.6 | 81 | | | | |
| CMHC-OP | 3.2 | 101 | 3.9 | 97 | 3.3 | 56 | 4.0 | 52 | | | | |
| CMHC-PH | 4.2 | 8 | 3.7 | 7 | 1.6 | 4 | 1.5 | 2 | | | | |
| AMHC | 5.4 | 42 | 5.2 | 44 | 4.6 | 37 | 6.1 | 27 | | | | |
| PHP | - | - | - | - | - | - | - | - | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | 4.3 | 26 | 4.1 | 126 |
| CMHC-OP | | | | | | | | | 2.5 | 13 | 3.4 | 76 |
| CMHC-PH | | | | | | | | | 6.3 | 7 | 6.7 | 27 |
| AMHC | | | | | | | | | 5.6 | 5 | 2.2 | 12 |
| PHP | | | | | | | | | 8.0 | 1 | 5.0 | 11 |
| Beneficiaries Receiving Baseline and Demonstration Services | 5.6 | 182 | 7.6 | 173 | 7.5 | 184 | 8.8 | 209 | 3.9 | 67 | 4.9 | 97 |
| CMHC-OP | 5.3 | 48 | 7.1 | 43 | 6.3 | 46 | 8.4 | 54 | 3.3 | 38 | 5.5 | 63 |
| CMHC-PH | 8.3 | 40 | 13.9 | 39 | 14.0 | 41 | 16.3 | 49 | 1.6 | 7 | 5.6 | 14 |
| AMHC | 4.6 | 94 | 5.1 | 90 | 5.3 | 95 | 5.5 | 106 | 5.5 | 22 | 2.3 | 20 |
| PHP | - | - | 5.0 | 1 | 1.5 | 2 | - | - | - | - | - | - |
| Recreation Therapist | 7.9 | 23 | 8.9 | 24 | 8.3 | 18 | - | - | 2.5 | 28 | 4.0 | 11 |
| Beneficiaries Receiving Baseline Services | 6.2 | 5 | 6.5 | 2 | 1.0 | 1 | - | - | | | | |
| CMHC-OP | 7.5 | 4 | 6.5 | 2 | 1.0 | 1 | - | - | | | | |
| CMHC-PH | 1.0 | 1 | - | - | - | - | - | - | | | | |
| AMHC | - | - | - | - | - | - | - | - | | | | |
| PHP | - | - | - | - | - | - | - | - | | | | |
| Beneficiaries Receiving Demonstration Services Only | | | | | | | | | 1.5 | 2 | 3.7 | 3 |
| CMHC-OP | | | | | | | | | 1.0 | 1 | 5.0 | 2 |
| CMHC-PH | | | | | | | | | 2.0 | 1 | 1.0 | 1 |
| AMHC | | | | | | | | | - | - | - | - |
| PHP | | | | | | | | | - | - | - | - |
| Beneficiaries Receiving Baseline and Demonstration Services | 8.3 | 18 | 9.1 | 22 | 8.8 | 17 | 5.6 | 19 | 2.6 | 26 | 4.3 | 8 |
| CMHC-OP | 3.5 | 4 | 6.0 | 8 | 8.5 | 6 | 5.6 | 19 | 3.5 | 8 | 4.8 | 5 |
| CMHC-PH | 9.7 | 14 | 12.6 | 12 | 9.0 | 11 | 3.8 | 8 | 2.2 | 18 | 3.3 | 3 |
| AMHC | - | - | 1.0 | 2 | - | - | 7.5 | 10 | - | - | - | - |
| PHP | - | - | - | - | - | - | 1.0 | 1 | - | - | - | - |

NUMBER OF HOURS OF PARTIAL HOSPITALIZATION
PER BENEFICIARY BY FACILITY TYPE, BY PREVIOUS
MENTAL HEALTH TREATMENT STATUS--
BASELINE AND DEMONSTRATION

| | Baseline Period | | | | | | Demonstration Period | | | | | | | | | |
|----------------------------------|-----------------|-----|----------|-----|----------|-----|----------------------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| | Period 1 | | Period 2 | | Period 3 | | Period 4 | | Period 5 | | Period 6 | | Period 7 | | Period 8 | |
| | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N |
| All GMHC-PII | 221.6 | 214 | 240.2 | 263 | 260.1 | 306 | 257.0 | 360 | 176.7 | 708 | 195.1 | 922 | 226.5 | 920 | 225.4 | 905 |
| | 171.2 | 23 | 120.6 | 28 | 169.4 | 34 | 214.3 | 44 | 145.8 | 307 | 162.0 | 396 | 172.7 | 431 | 153.9 | 450 |
| | * | * | * | * | * | * | * | * | 151.0 | 64 | 146.6 | 90 | 133.9 | 87 | 120.9 | 86 |
| | * | * | 128.4 | 22 | 158.2 | 29 | 242.3 | 33 | 144.5 | 243 | 166.6 | 306 | 182.5 | 344 | 161.7 | 364 |
| | 227.7 | 191 | 254.4 | 235 | 271.5 | 272 | 262.9 | 316 | 200.3 | 401 | 220.0 | 526 | 273.9 | 489 | 296.2 | 455 |
| PIIP | * | * | * | * | * | * | * | * | 181.1 | 50 | 206.4 | 58 | 233.4 | 60 | 270.2 | 46 |
| | 225.4 | 182 | 253.5 | 221 | 268.1 | 259 | 263.5 | 298 | 203.1 | 351 | 221.6 | 468 | 279.6 | 429 | 299.1 | 409 |
| Beneficiaries Receiving Baseline | | | | | | | | | | | | | | | | |
| Services Only | | | | | | | | | | | | | | | | |
| GMHC-PII | 125.6 | 32 | 122.3 | 38 | 91.9 | 45 | 123.8 | 56 | | | | | | | | |
| | * | * | * | * | * | * | * | * | | | | | | | | |
| | * | * | * | * | * | * | * | * | | | | | | | | |
| No Previous Treatment | * | * | * | * | * | * | * | * | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| Some Previous Treatment | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| PIIP | 125.2 | 30 | 122.6 | 34 | 88.8 | 41 | 118.3 | 54 | | | | | | | | |
| | * | * | * | * | * | * | * | * | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| No Previous Treatment | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| Some Previous Treatment | 120.0 | 29 | 122.3 | 32 | 88.8 | 41 | 113.5 | 51 | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| Beneficiaries Receiving | | | | | | | | | | | | | | | | |
| Demonstration Services Only | | | | | | | | | | | | | | | | |
| GMHC-PII | | | | | | | | | 158.7 | 298 | 184.1 | 466 | 214.5 | 523 | 205.4 | 560 |
| | | | | | | | | | 192.4 | 169 | 197.5 | 235 | 201.4 | 272 | 171.9 | 302 |
| | | | | | | | | | 195.1 | 34 | 172.5 | 57 | 142.6 | 65 | 121.6 | 70 |
| No Previous Treatment | | | | | | | | | 191.7 | 135 | 205.4 | 178 | 219.9 | 207 | 187.1 | 232 |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| Some Previous Treatment | | | | | | | | | 114.7 | 129 | 170.5 | 231 | 228.6 | 251 | 244.6 | 258 |
| | | | | | | | | | 170.0 | 34 | 216.1 | 45 | 247.7 | 47 | 276.0 | 37 |
| | | | | | | | | | 94.8 | 95 | 159.4 | 186 | 224.1 | 204 | 239.4 | 221 |
| Beneficiaries Receiving Baseline | | | | | | | | | | | | | | | | |
| and Demonstration Services | | | | | | | | | | | | | | | | |
| GMHC-PII | 238.5 | 182 | 260.1 | 225 | 289.1 | 261 | 281.5 | 304 | 189.7 | 410 | 206.3 | 456 | 242.4 | 397 | 257.9 | 345 |
| | 175.0 | 21 | 119.4 | 24 | 175.5 | 30 | 211.6 | 42 | 88.8 | 138 | 110.3 | 161 | 123.6 | 159 | 117.2 | 148 |
| | | * | * | * | * | * | * | * | 101.0 | 30 | 101.9 | 33 | 108.0 | 22 | * | * |
| No Previous Treatment | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| Some Previous Treatment | * | * | * | * | 163.8 | 25 | 240.4 | 31 | 85.4 | 108 | 112.5 | 128 | 126.1 | 137 | 117.2 | 132 |
| | 246.8 | 161 | 276.9 | 201 | 303.9 | 231 | 292.7 | 262 | 241.0 | 272 | 258.7 | 295 | 321.8 | 238 | 363.6 | 197 |
| | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| PIIP | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| No Previous Treatment | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| Some Previous Treatment | 245.3 | 153 | 275.7 | 189 | 301.8 | 218 | 294.5 | 247 | 243.2 | 256 | 262.6 | 282 | 339.9 | 225 | 369.3 | 188 |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

 $x < 20$ cases

EXHIBIT 38

HHS, Office of the Secretary
MOST FREQUENTLY OCCURRING
COMBINATION OF SERVICES PROVIDERS--
BASELINE AND DEMONSTRATION

| | <u>PROVIDER COMBINATIONS</u> | | <u>PERCENT OF BENEFICIARIES</u> | |
|-----|--|--|---------------------------------|----------------------|
| | | | <u>BASELINE</u> | <u>DEMONSTRATION</u> |
| 1. | Psychiatrist Only | | 29.5% | 14.0% |
| 2. | Psychiatric Social Worker Only | | 8.3 | 25.1 |
| 3. | Other Only* | | 20.0 | 11.3 |
| 4. | Psychiatrist and Other | | 18.4 | 14.3 |
| 5. | Psychiatrist and Psychiatric Social Worker | | 3.5 | 8.5 |
| 6. | Psychiatrist, Psychiatric Social Worker, and Other | | 5.4 | 6.5 |
| 7. | Psychiatric Social Worker and Other | | 3.5 | 2.6 |
| 8. | QMHP Psychologist | | 1.7 | 3.2 |
| 9. | Psychiatrist, QMHP Psychologist, and Other | | 1.1 | 2.5 |
| 10. | Psychiatrist, Nonpsychiatric physician, and Other | | <u>0.2</u> | <u>2.2</u> |
| | | | 91.6% | 90.2% |

* Includes Other Psychologist, Other Nurse, Other Social Worker, Counselor, Recreation Therapist, Expressive Arts Therapist, Other.

IHS, Office of the Secretary

PERCENT OF BENEFICIARIES RECEIVING SERVICES
FROM SPECIFIC PROVIDERS BY FACILITY TYPE--
BASELINE AND DEMONSTRATION
ALL BENEFICIARIES

| SERVICE PROVIDER | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---------------------------|-----------------|---------|---------|-------|------|----------------------|---------|---------|-------|------|
| | ALL | CMHC-OP | CMHC-PH | AMHC | PHP | ALL | CMHC-OP | CMHC-PH | AMHC | PHP |
| NUMBER OF CASES | 3,193 | 1,468 | 275 | 1,227 | 223 | 8,199 | 3,720 | 633 | 3,636 | 210 |
| Psychiatrist | 64.3 | 75.0 | 77.8 | 56.8 | 18.8 | 55.8*** | 64.7 | 75.2 | 42.6 | 67.1 |
| Nonpsychiatric Physician | 1.0 | 1.6 | 1.8 | 0.1 | 1.8 | 6.4*** | 11.3 | 4.4 | 1.5 | 9.0 |
| QMHP Psychologist | 6.9 | 6.8 | 15.3 | 5.8 | 3.6 | 10.8*** | 6.0 | 7.3 | 13.6 | 59.0 |
| Other Psychologist | 11.2 | 2.7 | 9.5 | 19.5 | 24.7 | 9.6*** | 9.3 | 13.0 | 9.1 | 12.9 |
| Psychiatric Nurse | 3.9 | 2.2 | 5.5 | 6.2 | 0.9 | 2.0 NS | 1.7 | 5.7 | 0.7 | 17.1 |
| Other Nurse | 22.3 | 17.0 | 30.2 | 28.4 | 14.3 | 15.0* | 12.2 | 16.4 | 15.4 | 51.9 |
| Psychiatric Social Worker | 23.4 | 16.0 | 34.2 | 27.1 | 28.6 | 46.5*** | 32.5 | 43.8 | 62.3 | 29.5 |
| Other Social Worker | 10.2 | 9.5 | 23.3 | 8.4 | 9.0 | 10.9* | 14.7 | 21.0 | 5.5 | 6.7 |
| Counselor | 8.2 | 7.6 | 6.5 | 6.0 | 26.0 | 18.9*** | 31.3 | 21.3 | 5.4 | 24.8 |
| Recreation Therapist | 2.0 | 1.2 | 9.5 | 0.2 | 7.6 | 0.7* | 0.7 | 4.6 | 0.0 | 0.0 |
| Expressive Arts Therapist | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.7 NS | 0.0 | 0.0 | 1.5 | 0.0 |
| Other | 21.1 | 21.7 | 33.1 | 18.7 | 15.7 | 7.2*** | 8.5 | 14.4 | 3.5 | 26.2 |

1/ Column totals do not equal 100.0% since clients may receive multiple services.

2 sample z-test for proportion

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES RECEIVING SERVICES
FROM SPECIFIC PROVIDERS BY FACILITY TYPE--
BASELINE AND DEMONSTRATION
BENEFICIARIES UNDER AGE 65

| SERVICE PROVIDER | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---------------------------|-----------------|---------|---------|------|------|----------------------|---------|---------|-------|------|
| | ALL | CMHC-OP | CMHC-PH | AMHC | PHP | ALL | CMHC-OP | CMHC-PH | AMHC | PHP |
| NUMBER OF CASES | 1,719 | 806 | 184 | 563 | 166 | 3,762 | 2,075 | 407 | 1,183 | 97 |
| Psychiatrist | 74.2 | 83.3 | 83.2 | 75.3 | 16.9 | 66.6 *** | 66.9 | 77.4 | 63.5 | 53.6 |
| Nonpsychiatric Physician | 0.9 | 1.1 | 1.1 | 0.2 | 2.4 | 8.1 *** | 12.0 | 4.9 | 2.7 | 5.2 |
| QMHP Psychologist | 7.9 | 9.1 | 17.4 | 5.2 | 1.2 | 12.4 * | 7.4 | 6.9 | 18.7 | 63.9 |
| Other Psychologist | 10.1 | 3.2 | 12.0 | 13.7 | 29.5 | 12.7 *** | 11.1 | 11.3 | 15.1 | 24.7 |
| Psychiatric Nurse | 5.2 | 3.1 | 7.1 | 8.9 | 1.2 | 2.6 NS | 2.3 | 7.9 | 0.5 | 10.3 |
| Other Nurse | 25.0 | 18.9 | 26.6 | 39.1 | 4.8 | 22.4 * | 17.0 | 23.6 | 30.0 | 42.3 |
| Psychiatric Social Worker | 21.7 | 15.8 | 31.0 | 20.8 | 43.4 | 35.2 *** | 31.7 | 42.5 | 39.6 | 27.8 |
| Other Social Worker | 8.8 | 8.3 | 15.2 | 6.9 | 10.2 | 12.0 * | 14.0 | 16.5 | 7.2 | 9.3 |
| Counselor | 8.7 | 6.3 | 8.2 | 9.4 | 18.7 | 24.7*** | 33.0 | 22.4 | 11.0 | 24.7 |
| Recreation Therapist | 2.6 | 1.6 | 11.4 | 0.2 | 6.0 | 1.1 NS | 1.1 | 4.9 | 0.0 | 0.0 |
| Expressive Arts Therapist | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 NS | 0.0 | 0.0 | 0.5 | 0.0 |
| Other | 20.1 | 17.6 | 33.7 | 19.7 | 18.7 | 10.9 *** | 10.5 | 20.1 | 7.8 | 19.6 |

1/ Column totals do not equal 100.0% since clients may receive multiple services.

2 sample z-test for proportion

* p < .05

** p < .01

*** p < .001

EXHIBIT 41

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES RECEIVING SERVICES
FROM SPECIFIC PROVIDERS BY FACILITY TYPE--
BASELINE AND DEMONSTRATION
BENEFICIARIES AGE 65 AND OVER

| SERVICE PROVIDER | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---------------------------|-----------------|---------|---------|------|------|----------------------|---------|---------|-------|------|
| | ALL | CMHC-OP | CMHC-PH | AMHC | PHP | ALL | CMHC-OP | CMHC-PH | AMHC | PHP |
| NUMBER OF CASES | 1,474 | 662 | 91 | 664 | 57 | 4,437 | 1,645 | 226 | 2,453 | 113 |
| Psychiatrist | 52.8 | 65.0 | 67.0 | 41.1 | 24.6 | 46.6 *** | 61.9 | 71.2 | 32.5 | 78.8 |
| Nonpsychiatric Physician | 1.2 | 2.1 | 3.3 | 0.0 | 0.0 | 4.9 *** | 10.5 | 3.5 | 0.9 | 12.4 |
| QMHP Psychologist | 2.0 | 4.1 | 11.0 | 6.3 | 10.5 | 9.5 *** | 4.2 | 8.0 | 11.1 | 54.9 |
| Other Psychologist | 12.6 | 2.0 | 4.4 | 24.4 | 10.5 | 6.9 ** | 7.0 | 15.9 | 6.2 | 2.7 |
| Psychiatric Nurse | 2.4 | 1.1 | 2.2 | 3.9 | 0.0 | 1.5 NS | 1.0 | 1.8 | 0.9 | 23.0 |
| Other Nurse | 19.2 | 14.7 | 37.4 | 19.3 | 42.1 | 8.6 *** | 6.2 | 3.5 | 8.3 | 60.2 |
| Psychiatric Social Worker | 25.4 | 16.3 | 40.7 | 32.5 | 24.6 | 56.0 *** | 33.5 | 46.0 | 73.2 | 31.0 |
| Other Social Worker | 11.9 | 10.9 | 39.6 | 9.6 | 5.3 | 9.9 NS | 15.6 | 29.2 | 4.6 | 4.4 |
| Counselor | 7.5 | 9.1 | 3.3 | 3.2 | 47.4 | 13.9 * | 29.1 | 19.5 | 2.7 | 24.8 |
| Recreation Therapist | 1.2 | 0.6 | 5.5 | 0.3 | 12.3 | 0.3 NS | 0.2 | 4.0 | 0.0 | 0.0 |
| Expressive Arts Therapist | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 NS | 0.0 | 0.0 | 2.0 | 0.0 |
| Other | 22.3 | 26.7 | 31.9 | 17.3 | 7.0 | 4.0 *** | 6.0 | 4.0 | 1.4 | 31.9 |

1/ Column totals do not equal 100.0% since clients may receive multiple services.

2 sample z-test for proportion

* p <.05

** p <.01

*** p <.001

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES RECEIVING SERVICES
FROM SPECIFIC PROVIDERS BY FACILITY TYPE--

BASELINE AND DEMONSTRATION

BENEFICIARIES WITH NO PREVIOUS MENTAL HEALTH TREATMENT

| SERVICES | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---------------------------|-----------------|---------|---------|------|------|----------------------|---------|---------|-------|------|
| | ALL | CMHC-OP | CMHC-PH | AMHC | PHP | ALL | CMHC-OP | CMHC-PH | AMHC | PHP |
| NUMBER OF CASES | 569 | 282 | 29 | 239 | 19 | 2,625 | 1,004 | 100 | 1,462 | 59 |
| Psychiatrist | 58.3 | 72.3 | 72.4 | 43.1 | 21.1 | 41.2*** | 49.6 | 65.0 | 32.6 | 71.6 |
| Nonpsychiatric Physician | 1.4 | 1.4 | 13.8 | 0.0 | 0.0 | 3.7* | 8.4 | 5.0 | 0.2 | 6.8 |
| QMHP Psychologist | 8.3 | 5.7 | 27.6 | 9.2 | 5.3 | 10.9 NS | 6.1 | 11.0 | 12.2 | 61.0 |
| Other Psychologist | 13.0 | 7.1 | 17.2 | 18.4 | 26.3 | 8.8* | 10.9 | 23.0 | 6.7 | 1.7 |
| Psychiatric Nurse | 2.1 | 2.8 | 0.0 | 1.7 | 0.0 | 1.7NS | 0.7 | 5.0 | 0.9 | 33.9 |
| Other Nurse | 15.0 | 14.9 | 31.0 | 20.9 | 36.8 | 7.4*** | 5.7 | 3.0 | 7.2 | 47.5 |
| Psychiatric Social Worker | 29.0 | 23.8 | 31.0 | 35.6 | 21.1 | 57.1*** | 35.0 | 35.0 | 74.6 | 39.0 |
| Other Social Worker | 11.8 | 12.1 | 34.5 | 9.6 | 0.0 | 9.8* | 15.6 | 24.0 | 4.9 | 5.1 |
| Counselor | 8.8 | 8.9 | 6.9 | 5.4 | 52.6 | 14.7*** | 29.1 | 19.0 | 4.2 | 25.4 |
| Recreation Therapist | 2.1 | 2.5 | 17.2 | 0.0 | 0.0 | 0.3NS | 0.5 | 4.0 | 0.0 | 0.0 |
| Expressive Arts Therapist | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0NS | 0.0 | 0.0 | 1.8 | 0.0 |
| Other | 15.3 | 14.2 | 41.4 | 14.2 | 5.3 | 4.9*** | 8.0 | 6.0 | 1.8 | 25.4 |

1/ Column totals do not equal 100.0% since clients may receive multiple services.

2 sample z-test for proportion

* p <.05

** p <.01

*** p <.001

EXHIBIT 43

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES RECEIVING SERVICES
FROM SPECIFIC PROVIDERS BY FACILITY TYPE--
BASELINE AND DEMONSTRATION
BENEFICIARIES WITH SOME PREVIOUS
MENTAL HEALTH TREATMENT

| SERVICES | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---------------------------|-----------------|---------|---------|------|------|----------------------|---------|---------|-------|------|
| | ALL | CMHC-OP | CMHC-PH | AMHC | PHP | ALL | CMHC-OP | CMHC-PH | AMHC | PHP |
| NUMBER OF CASES | 2,069 | 899 | 212 | 779 | 179 | 4,285 | 2,208 | 426 | 1,571 | 80 |
| Psychiatrist | 75.8 | 88.2 | 81.1 | 73.3 | 17.9 | 68.5 *** | 74.0 | 78.4 | 59.5 | 42.5 |
| Nonpsychiatric Physician | 1.0 | 1.6 | 0.5 | 0.1 | 2.2 | 8.8 *** | 13.7 | 5.2 | 3.2 | 2.5 |
| QMHP Psychologist | 5.8 | 6.0 | 12.7 | 4.5 | 2.8 | 10.3 *** | 4.9 | 3.8 | 17.6 | 51.3 |
| Other Psychologist | 8.9 | 1.7 | 9.9 | 12.6 | 28.5 | 10.9 NS | 8.3 | 13.1 | 12.8 | 33.8 |
| Psychiatric Nurse | 5.4 | 2.3 | 7.1 | 9.5 | 1.1 | 2.0 *** | 1.9 | 6.6 | 0.6 | 8.8 |
| Other Nurse | 27.7 | 21.4 | 34.0 | 37.6 | 9.5 | 20.7 *** | 15.5 | 18.3 | 28.4 | 26.3 |
| Psychiatric Social Worker | 22.5 | 16.2 | 38.7 | 21.6 | 38.5 | 37.6 *** | 32.1 | 49.3 | 43.5 | 12.5 |
| Other Social Worker | 10.2 | 10.7 | 24.1 | 5.9 | 10.6 | 12.8 NS | 15.0 | 23.5 | 6.9 | 12.5 |
| Counselor | 8.6 | 7.2 | 7.1 | 7.6 | 21.8 | 23.9 *** | 35.6 | 24.6 | 7.6 | 13.8 |
| Recreation Therapist | 2.0 | 0.9 | 9.9 | 0.4 | 5.0 | 0.9 NS | 0.6 | 5.6 | 0.0 | 0.0 |
| Expressive Arts Therapist | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 NS | 0.0 | 0.0 | 0.5 | 0.0 |
| Other | 16.5 | 12.9 | 30.7 | 16.3 | 19.0 | 8.5 *** | 9.0 | 15.0 | 6.3 | 5.0 |

1/ Column totals do not equal 100.0% since clients may receive multiple services.

2 sample z-test for proportion

* p < .05

** p < .01

*** p < .001

EXHIBIT 44

IHS, Office of the Secretary

DISTRIBUTION OF AMBULATORY SERVICE
ENCOUNTERS BY PERSONNEL TYPE, BY FACILITY
TYPE--BASELINE AND DEMONSTRATION
ALL BENEFICIARIES

| PERSONNEL TYPE | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---------------------------------|-----------------|---------|---------|--------|-------|----------------------|---------|---------|--------|--------|
| | ALL | CMHC-OP | CMHC-PH | AMHC | PIIP | ALL | CMHC-OP | CMHC-PH | AMHC | PIIP |
| NUMBER OF ENCOUNTERS | 63,032 | 23,572 | 14,265 | 22,938 | 2,257 | 132,158 | 52,973 | 16,332 | 50,177 | 12,676 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Psychiatrist | 19.8 | 21.0 | 12.3 | 24.6 | 5.9 | 27.6 | 25.8 | 26.7 | 16.3 | 39.5 |
| Nonpsychiatric Physician | .1 | .2 | .0 | .0 | .4 | 1.1 | 2.4 | .5 | .3 | .2 |
| QMHP Psychologist | 2.3 | 3.2 | 2.0 | 1.8 | .3 | 4.6 | 2.1 | 2.3 | 5.0 | 15.8 |
| Other Psychologist | 4.9 | 1.9 | 1.9 | 10.3 | .8 | 3.0 | 2.8 | 3.1 | 4.0 | .0 |
| Psychiatric Nurse | 1.7 | .8 | .9 | 3.3 | .0 | 1.1 | 1.2 | 1.6 | .9 | .7 |
| Other Nurse | 20.4 | 14.5 | 18.9 | 27.1 | 25.0 | 11.5 | 8.6 | 9.1 | 14.0 | 16.8 |
| Psychiatric Social Worker | 13.2 | 14.0 | 10.9 | 13.5 | 15.0 | 33.1 | 23.6 | 26.8 | 50.9 | 10.3 |
| Other Social Worker | 17.1 | 20.0 | 30.4 | 4.7 | 28.8 | 4.8 | 7.9 | 8.5 | 1.4 | .4 |
| Counselor | 7.6 | 13.4 | 3.4 | 2.6 | 23.3 | 8.7 | 11.2 | 14.8 | 4.2 | 8.5 |
| Recreation Therapist | 1.0 | .8 | 3.3 | .0 | .0 | .3 | .4 | 1.3 | .0 | .0 |
| Expressive Arts Therapist | .0 | .0 | .0 | .0 | .0 | .5 | .0 | .0 | 1.2 | .0 |
| Other Mental Health Personnel | 11.9 | 10.2 | 16.3 | 12.1 | .4 | 3.7 | 4.0 | 5.3 | 1.8 | 7.9 |
| Chi-square test of independence | | | | | | *** | *** | *** | *** | *** |

* p <.05

** p <.01

*** p <.001

EXHIBIT 45

HHS, Office of the Secretary

DISTRIBUTION OF AMBULATORY SERVICE
ENCOUNTERS BY PERSONNEL TYPE, BY FACILITY
TYPE--BASELINE AND DEMONSTRATION
BENEFICIARIES UNDER AGE 65

| PERSONNEL TYPE | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---------------------------------|-----------------|---------|---------|--------|-------|----------------------|---------|---------|--------|-------|
| | ALL | CMHC-OP | CMHC-PH | AMHC | PHP | ALL | CMHC-OP | CMHC-PH | AMHC | PHP |
| NUMBER OF ENCOUNTERS | 34,978 | 13,033 | 7,121 | 13,044 | 1,780 | 68,085 | 32,160 | 11,335 | 19,399 | 5,191 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Psychiatrist | 24.3 | 25.5 | 20.5 | 27.8 | 4.8 | 33.0 | 38.1 | 30.0 | 25.5 | 36.5 |
| Nonpsychiatric Physician | .1 | .1 | .0 | .0 | .6 | 1.4 | 2.5 | .4 | .4 | .1 |
| QMHP Psychologist | 2.5 | 3.7 | 2.9 | 1.3 | .1 | 4.1 | 2.2 | 2.9 | 4.7 | 16.0 |
| Other Psychologist | 3.5 | 2.2 | 2.2 | 5.7 | 1.0 | 4.0 | 3.0 | 3.9 | 6.9 | .0 |
| Psychiatric Nurse | 2.4 | 1.1 | 1.6 | 4.4 | .0 | 1.2 | 1.7 | 2.2 | .1 | .5 |
| Other Nurse | 20.8 | 13.0 | 15.8 | 31.8 | 16.6 | 16.0 | 11.4 | 12.3 | 26.2 | 14.9 |
| Psychiatric Social Worker | 11.7 | 12.4 | 13.8 | 9.2 | 17.4 | 18.9 | 17.8 | 18.5 | 23.0 | 11.5 |
| Other Social Worker | 12.6 | 16.6 | 16.1 | 3.5 | 36.3 | 4.9 | 7.0 | 6.0 | 1.9 | .4 |
| Counselor | 8.6 | 14.4 | 3.8 | 3.6 | 22.9 | 10.8 | 11.0 | 14.8 | 7.4 | 13.6 |
| Recreation Therapist | 1.4 | .9 | 5.3 | .0 | .0 | .6 | .7 | 1.7 | .0 | .0 |
| Expressive Arts Therapist | .0 | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .2 | .0 |
| Other Mental Health Personnel | 12.1 | 10.1 | 17.9 | 12.6 | .4 | 4.9 | 4.6 | 7.2 | 3.6 | 6.5 |
| Chi-square test of independence | | | | | | *** | *** | *** | *** | *** |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

DISTRIBUTION OF AMBULATORY SERVICE
ENCOUNTERS BY PERSONNEL TYPE, BY FACILITY
TYPE--BASELINE AND DEMONSTRATION
BENEFICIARIES AGE 65 AND OVER

| PERSONNEL TYPE | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---------------------------------|-----------------|---------|---------|-------|-------|----------------------|---------|---------|--------|-------|
| | ALL | CMHC-OP | CMHC-PH | AMHC | PHP | ALL | CMHC-OP | CMHC-PH | AMHC | PHP |
| NUMBER OF ENCOUNTERS | 27,278 | 10,297 | 7,124 | 9,399 | 458 | 58,626 | 19,689 | 4,967 | 26,967 | 7,203 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Psychiatrist | 13.6 | 14.5 | 3.9 | 20.0 | 10.7 | 22.3 | 31.9 | 18.6 | 10.8 | 41.8 |
| Nonpsychiatric Physician | .2 | .4 | .0 | .0 | .0 | .9 | 2.3 | .6 | .2 | .2 |
| QMHP Psychologist | 2.0 | 2.2 | 1.1 | 2.5 | 1.3 | 5.1 | 1.7 | .8 | 5.4 | 16.2 |
| Other Psychologist | 6.5 | 1.5 | 1.5 | 16.2 | .0 | 2.1 | 2.6 | 1.4 | 2.4 | .0 |
| Psychiatric Nurse | .8 | .4 | .1 | 1.8 | .0 | 1.0 | .4 | .2 | 1.6 | .8 |
| Other Nurse | 20.1 | 16.6 | 22.0 | 20.7 | 59.0 | 6.8 | 4.0 | 1.3 | 6.9 | 17.7 |
| Psychiatric Social Worker | 14.9 | 16.1 | 7.9 | 19.6 | 2.4 | 46.4 | 32.9 | 47.0 | 66.2 | 9.1 |
| Other Social Worker | 23.2 | 24.8 | 44.7 | 6.3 | .7 | 4.9 | 9.4 | 13.6 | 1.2 | .3 |
| Counselor | 6.4 | 12.5 | 2.9 | 1.3 | 26.0 | 6.8 | 11.6 | 15.4 | 2.3 | 5.1 |
| Recreation Therapist | .6 | .7 | 1.2 | .0 | .0 | .0 | .0 | .4 | .0 | .0 |
| Expressive Arts Therapist | | | | | | 1.0 | .0 | .0 | 2.1 | .0 |
| Other Mental Health Personnel | 11.7 | 10.3 | 14.7 | 11.6 | .0 | 2.6 | 3.3 | .8 | .8 | 8.7 |
| Chi-square test of independence | | | | | | *** | *** | *** | *** | *** |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

DISTRIBUTION OF AMBULATORY SERVICE
ENCOUNTERS BY PERSONNEL TYPE, BY FACILITY
TYPE--BASELINE AND DEMONSTRATION
BENEFICIARIES WITH NO PREVIOUS TREATMENT

| PERSONNEL TYPE | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---------------------------------|-----------------|---------|---------|-------|-------|----------------------|---------|---------|--------|-------|
| | ALL | CMHC-OP | CMHC-PH | AMHC | PHP | ALL | CMHC-OP | CMHC-PH | AMHC | PHP |
| NUMBER OF ENCOUNTERS | 10,192 | 4,396 | 1,873 | 3,658 | 265 | 33,210 | 10,522 | 1,499 | 16,622 | 4,567 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Psychiatrist | 16.4 | 16.4 | 12.5 | 19.4 | 3.4 | 17.8 | 24.4 | 21.5 | 7.3 | 39.1 |
| Nonpsychiatric Physician | .1 | .2 | .3 | .0 | .0 | .6 | 1.6 | 1.4 | .0 | .1 |
| QMHP Psychologist | 3.1 | 4.0 | 1.6 | 3.1 | 1.5 | 5.8 | 1.7 | .8 | 4.3 | 22.3 |
| Other Psychologist | 8.6 | 6.1 | 4.6 | 14.3 | .0 | 2.9 | 3.7 | 4.5 | 3.1 | .0 |
| Psychiatric Nurse | .6 | .9 | .0 | .5 | .0 | 1.1 | .4 | 3.0 | 1.3 | 1.0 |
| Other Nurse | 17.7 | 6.8 | 24.6 | 24.4 | 59.2 | 5.4 | 5.5 | 1.2 | 4.5 | 10.3 |
| Psychiatric Social Worker | 20.1 | 25.6 | 11.2 | 19.5 | .0 | 51.1 | 35.4 | 35.4 | 73.1 | 12.6 |
| Other Social Worker | 14.7 | 15.0 | 32.8 | 6.1 | .0 | 4.3 | 9.8 | 10.8 | 1.3 | .2 |
| Counselor | 8.9 | 15.8 | .2 | 3.0 | 35.8 | 7.0 | 11.6 | 15.9 | 2.8 | 8.6 |
| Recreation Therapist | .6 | .8 | 1.3 | .0 | .0 | .2 | .3 | 3.1 | .0 | .0 |
| Expressive Arts Therapist | | | | | | .7 | .0 | .0 | 1.4 | .0 |
| Other Mental Health Personnel | 9.2 | 8.5 | 11.0 | 9.8 | .0 | 3.1 | 5.6 | 2.3 | .8 | 5.8 |
| Chi-square test of independence | | | | | | *** | *** | *** | *** | *** |

* p < .05

** p < .01

*** p < .001

EXHIBIT 48

HHS, Office of the Secretary

DISTRIBUTION OF AMBULATORY SERVICE
ENCOUNTERS BY PERSONNEL TYPE, BY FACILITY
TYPE--BASELINE AND DEMONSTRATION
BENEFICIARIES WITH SOME PREVIOUS TREATMENT

| PERSONNEL TYPE | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---------------------------------|-----------------|---------|----------|--------|-------|----------------------|---------|----------|--------|-------|
| | ALL | CMHC-OP | CMHC-PII | AMHC | PHP | ALL | CMHC-OP | CMHC-PII | AMHC | PHP |
| NUMBER OF ENCOUNTERS | 45,190 | 15,700 | 12,113 | 15,504 | 1,873 | 76,334 | 36,657 | 13,110 | 24,214 | 2,353 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Psychiatrist | 21.6 | 22.6 | 12.0 | 29.8 | 6.0 | 32.4 | 39.0 | 26.9 | 24.6 | 39.5 |
| Nonpsychiatric Physician | .1 | .2 | .0 | .0 | .5 | 1.5 | 2.6 | .4 | .5 | .0 |
| QMHP Psychologist | 2.0 | 3.1 | 2.0 | 1.1 | .2 | 3.6 | 1.9 | 2.2 | 5.8 | 14.2 |
| Other Psychologist | 2.4 | .7 | 1.5 | 5.1 | 1.0 | 3.5 | 2.3 | 3.3 | 5.7 | .0 |
| Psychiatric Nurse | 2.1 | .4 | 1.0 | 4.8 | .0 | 1.0 | 1.1 | 1.4 | .6 | .8 |
| Other Nurse | 23.0 | 17.9 | 18.0 | 32.3 | 19.7 | 14.6 | 9.6 | 8.8 | 25.0 | 17.6 |
| Psychiatric Social Worker | 11.3 | 12.4 | 10.7 | 10.1 | 14.6 | 23.0 | 20.1 | 27.2 | 26.3 | 11.1 |
| Other Social Worker | 19.0 | 24.4 | 30.1 | 2.9 | 34.5 | 5.7 | 7.5 | 8.8 | 1.6 | 1.5 |
| Counselor | 6.8 | 10.7 | 3.9 | 3.1 | 23.0 | 10.6 | 11.8 | 15.4 | 6.3 | 9.1 |
| Recreation Therapist | 1.3 | .9 | 3.6 | .0 | .0 | .4 | .3 | 1.2 | .0 | .0 |
| Expressive Arts Therapist | .0 | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .2 | .0 |
| Other Mental Health Personnel | 10.6 | 6.6 | 17.2 | 10.8 | .4 | 3.7 | 3.7 | 4.3 | 3.2 | 6.1 |
| Chi-square test of independence | | | | | | *** | *** | *** | *** | *** |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary
COLUMN PERCENT OF ENCOUNTERS BY SERVICE
AND PROVIDER--BASELINE
ALL FACILITIES

| Service Type | Psychiatric | Nonpsychiatric Physician | QMHP Psychologist | Other Psychologist | Psychiatric Nurse | Other Nurse | Psychiatric Social Worker | Other Social Worker | Counselor | Recreation Therapist | Expressive Arts Therapist | Other Mental Health Personnel |
|--------------------------------|-------------|--------------------------|-------------------|--------------------|-------------------|-------------|---------------------------|---------------------|-----------|----------------------|---------------------------|-------------------------------|
| NUMBER OF ENCOUNTERS | 12,462 | 69 | 1,460 | 3,079 | 1,065 | 12,887 | 8,294 | 10,797 | 4,768 | 655 | 1 | 7,525 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Individual Therapy | 30.2 | 17.4 | 59.0 | 74.5 | 20.6 | 31.9 | 52.7 | 41.4 | 29.2 | 1.1 | 100.0 | 20.9 |
| Group Therapy | 1.0 | 5.8 | 17.2 | 10.3 | 16.2 | 20.1 | 33.0 | 30.4 | 37.4 | 86.1 | 0.0 | 32.7 |
| Medication Therapy | 43.0 | 52.2 | 0.7 | 0.2 | 61.0 | 32.4 | 1.1 | 1.8 | 1.4 | 0.5 | 0.0 | 26.6 |
| Other Mental Health Services | 1.7 | 1.4 | 4.7 | 2.8 | 0.2 | 4.4 | 3.8 | 1.9 | 3.8 | 0.2 | 0.0 | 1.7 |
| Other Therapeutic Services | 0.4 | 0.0 | 0.4 | 0.9 | 0.1 | 6.3 | 3.0 | 16.1 | 7.2 | 11.5 | 0.0 | 11.9 |
| Other Diagnostic Services | 0.7 | 18.8 | 2.8 | 0.6 | 0.0 | 2.0 | 1.5 | 5.2 | 8.2 | 0.5 | 0.0 | 2.6 |
| Psychosocial History-Intake | 2.0 | 2.9 | 4.0 | 5.5 | 1.7 | 0.9 | 3.7 | 1.1 | 1.5 | 0.3 | 0.0 | 1.4 |
| Psychiatric-Psychological Exam | 19.0 | 0.0 | 8.6 | 4.1 | 0.1 | 0.0 | 0.3 | 0.1 | 0.2 | 0.0 | 0.0 | 0.2 |
| Other Services | 2.0 | 1.4 | 2.5 | 1.1 | 0.1 | 1.9 | 0.8 | 3.0 | 11.1 | 0.0 | 0.0 | 2.1 |

MHS, Office of the Secretary
COLUMN PERCENT OF ENCOUNTERS BY SERVICE
AND PROVIDER--DEMONSTRATION
ALL FACILITIES

| Service Type | Psychiatric | Nonpsychiatric Physician | QMHP Psychologist | Other Psychologist | Psychiatric Nurse | Other Nurse | Psychiatric Social Worker | Other Social Worker | Counselor | Recreation Therapist | Expressive Arts Therapist | Other Mental Health Personnel |
|--------------------------------|-------------|--------------------------|-------------------|--------------------|-------------------|-------------|---------------------------|---------------------|-----------|----------------------|---------------------------|-------------------------------|
| NUMBER OF ENCOUNTERS | 36,472 | 1,495 | 3,576 | 4,003 | 1,410 | 15,208 | 43,711 | 6,324 | 11,510 | 443 | 622 | 4,931 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Individual Therapy | 35.3 | 27.9 | 59.3 | 64.2 | 52.3 | 26.4 | 66.4 | 62.6 | 33.1 | 25.5 | 0.0 | 40.2 |
| Group Therapy | 9.7 | 1.9 | 25.4 | 22.3 | 9.9 | 20.7 | 27.0 | 27.5 | 54.1 | 50.3 | 0.0 | 46.2 |
| Medication Therapy | 10.5 | 45.6 | 0.3 | 0.0 | 14.3 | 24.6 | 0.2 | 0.4 | 0.1 | 0.0 | 0.0 | 0.5 |
| Other Mental Health Services | 0.7 | 0.8 | 3.6 | 4.4 | 1.3 | 2.7 | 2.7 | 4.0 | 10.7 | 1.4 | 0.0 | 4.7 |
| Other Therapeutic Services | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 22.1 | 100.0 | 0.0 |
| Other Diagnostic Services | 0.7 | 9.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Psychosocial History-Intake | 0.4 | 0.7 | 6.1 | 6.8 | 7.7 | 2.2 | 3.6 | 4.5 | 1.8 | 0.7 | 0.0 | 3.4 |
| Psychiatric-Psychological Exam | 11.5 | 3.9 | 2.9 | 2.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 |
| Other Services | 31.1 | 10.0 | 2.4 | 0.1 | 14.4 | 23.1 | 0.1 | 0.9 | 0.0 | 0.0 | 0.0 | 5.0 |

UHS, Office of the Secretary
 ROW PERCENT OF ENCOUNTERS BY SERVICE
 AND PROVIDER---BASELINE
 ALL FACILITIES

| Service Type | Number of Encounters | Percent | Psychiatric | Nonpsychiatric Physician | QMHP Psychologist | Other Psychologist | Psychiatric Nurse | Other Nurse | Psychiatric Social Worker | Other Social Worker | Counselor | Recreation Therapist | Expressive Arts Therapist | Other Mental Health Personnel |
|--------------------------------|-------------------------|---------|-------------|-----------------------------|-------------------|-----------------------|----------------------|-------------|------------------------------|------------------------|-----------|-------------------------|------------------------------|----------------------------------|
| Individual Therapy | 23,056 | 100.0 | 16.3 | 0.1 | 3.7 | 9.9 | 0.9 | 17.8 | 19.0 | 19.3 | 6.0 | 0.0 | 0.0 | 6.8 |
| Group Therapy | 14,276 | 100.0 | 0.9 | 0.0 | 1.8 | 2.2 | 1.2 | 18.1 | 19.2 | 22.9 | 12.5 | 4.0 | 0.0 | 17.2 |
| Medication Therapy | 12,496 | 100.0 | 42.9 | 0.3 | 0.1 | 0.1 | 5.2 | 33.5 | 0.8 | 0.7 | 0.5 | 0.0 | 0.0 | 16.0 |
| Other Mental Health Services | 1,762 | 100.0 | 11.7 | 0.1 | 3.9 | 4.9 | 0.1 | 32.0 | 18.1 | 11.7 | 10.2 | 0.1 | 0.0 | 7.3 |
| Other Therapeutic Services | 4,190 | 100.0 | 1.2 | 0.0 | 0.1 | 0.7 | 0.0 | 19.5 | 5.8 | 41.4 | 8.2 | 1.8 | 0.0 | 21.3 |
| Other Diagnostic Services | 1,693 | 100.0 | 5.3 | 0.8 | 2.4 | 1.1 | 0.0 | 15.5 | 7.4 | 33.0 | 23.0 | 0.2 | 0.0 | 11.3 |
| Psychosocial History-Intake | 1,228 | 100.0 | 20.8 | 0.2 | 4.8 | 13.8 | 1.5 | 9.6 | 25.2 | 10.0 | 5.7 | 0.2 | 0.0 | 8.4 |
| Psychiatric-Psychological Exam | 2,690 | 100.0 | 87.9 | 0.0 | 4.6 | 4.7 | 0.0 | 0.2 | 1.0 | 0.4 | 0.4 | 0.0 | 0.0 | 0.7 |
| Other Exam | 1,661 | 100.0 | 15.0 | 0.1 | 2.3 | 2.1 | 0.1 | 15.1 | 4.1 | 19.6 | 32.4 | 0.0 | 0.0 | 9.5 |

EXHIBIT 52

HHS, Office of the Secretary
ROW PERCENT OF ENCOUNTERS BY SERVICE
AND PROVIDER--DEMONSTRATION
ALL FACILITIES

| Service Type | Number of Encounters | Percent | Psychiatric | Nonpsychiatric Physician | QMHP Psychologist | Other Psychologist | Psychiatric Nurse | Other Nurse | Psychiatric Social Worker | Other Social Worker | Counselor | Recreation Therapist | Expressive Arts Therapist | Other Mental Health Personnel |
|--------------------------------|-------------------------|---------|-------------|-----------------------------|-------------------|-----------------------|----------------------|-------------|------------------------------|------------------------|-----------|-------------------------|------------------------------|----------------------------------|
| Individual Therapy | 63,057 | 100.0 | 20.4 | 0.7 | 5.7 | 4.1 | 1.2 | 6.4 | 40.0 | 6.3 | 6.0 | 0.2 | 0.0 | 3.1 |
| Group Therapy | 31,535 | 100.0 | 11.2 | 0.1 | 4.9 | 2.8 | 0.4 | 10.0 | 37.4 | 5.5 | 19.8 | 0.7 | 0.0 | 7.2 |
| Medication Therapy | 8,627 | 100.0 | 44.2 | 7.9 | 0.2 | 0.0 | 2.3 | 43.4 | 1.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.3 |
| Other Mental Health Services | 3,999 | 100.0 | 6.8 | 0.3 | 5.5 | 4.4 | 0.5 | 10.3 | 29.3 | 6.4 | 30.7 | 0.2 | 0.0 | 5.8 |
| Other Therapeutic Services | 720 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.6 | 86.4 | 0.0 |
| Other Diagnostic Services | 433 | 100.0 | 61.2 | 31.4 | 0.0 | 0.0 | 0.2 | 7.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Psychosocial History-Intake | 3,484 | 100.0 | 4.2 | 0.3 | 10.5 | 7.8 | 3.1 | 9.8 | 45.2 | 8.2 | 6.1 | 0.1 | 0.0 | 4.8 |
| Psychiatric-Psychological Exam | 4,598 | 100.0 | 91.5 | 1.3 | 3.8 | 2.0 | 0.0 | 0.1 | 0.7 | 0.2 | 0.3 | 0.0 | 0.0 | 0.1 |
| Other Exam | 15,705 | 100.0 | 72.3 | 1.0 | 0.9 | 0.0 | 1.3 | 22.4 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 1.6 |

2. HOW IS THE BENEFICIARY POPULATION AFFECTED BY THE DEMONSTRATION?

The demonstration waivers were designed to increase the availability of ambulatory mental health services for the elderly and disabled Medicare population by giving ambulatory mental health treatment facilities provider status under Medicare, raising the \$250 limit on annual reimbursement for Part B mental health benefits, reducing the effective coinsurance for Part B mental health benefits, removing the annual Part B deductible, and relaxing physician supervision requirements.

This section examines various aspects of the impact of the demonstration on the Medicare population, as follows:

- . Were there differences in the sites' mental health service utilization rates of beneficiaries in their service areas from the pre-waiver to post-waiver periods?
- . Did the proportion of the sites' ambulatory mental health caseloads who were beneficiaries differ in the pre-waiver and post-waiver periods?
- . Were there differences in the overall demographic characteristics of the sites' beneficiary caseloads from the pre-waiver to post-waiver periods?
- . Were there differences in the proportion of the sites' total mental health encounters (hours of partial hospitalization) that were provided to beneficiaries across the post-waiver periods?
- . Were the sites reaching a new population under the demonstration, or were they providing additional services charged to Medicare to the same population?

Each of these questions is analyzed separately below.

To examine these questions fully, the analyses have been performed in two ways. First, the beneficiary population of users of demonstration site services were partitioned into two groups: Baseline and Demonstration. Beneficiary users were partitioned into these two groups according to the date of intake into services at the demonstration sites. Those whose intake was prior to

April 15, 1981, were designated as Baseline; those after that date as Demonstration. This applies to the analysis for addressing the first two questions. Second, the beneficiary population of users of demonstration site services were partitioned into three groups: Baseline Only, Demonstration Only, and Baseline and Demonstration. This latter partitioning was based upon dates of service. Those with services only between April 15, 1979, and April 14, 1981, were classified as Baseline Only; those with services only after April 15, 1981, were classified as Demonstration Only; and those with services in both periods were classified as Baseline and Demonstration. This applies to the analysis for addressing the second two questions. The rationale for analyzing the data in this manner was to determine whether there were any discernible differences in characteristics among these three groups--differences that might relate to access, service utilization, cost, and outcome questions. The two-group and the three-group analyses are presented separately below.

Two-Group Analysis

(1) Were There Differences In The Sites' Mental Health Service Utilization Rates Of Beneficiaries In Their Service Areas From The Pre-Waiver To Post-Waiver Periods?

Exhibit 53 shows an analysis of the pre- and post-waiver rates of utilization of MMHD facilities by Medicare beneficiaries. The data in the exhibit were derived from the following sources:

- The Medicare enrollee data are from the HCFA AE-11 Reports for July 1, 1980 (pre-waiver period) and July 1, 1981 and July 1, 1982, (post-waiver period--averaged over the two years).
- Pre-waiver utilization data are from the database created by the Beneficiary Clinical Abstracting Form--Services, Charges, and Reimbursements.
- Post-waiver utilization data are from the database created by the submission of bills to ODR.

The exhibit shows that, prior to the demonstration, there were 2,405,684 Medicare enrollees residing in the service areas of MMHD facilities and 2,551,000 Medicare enrollees residing in the same area early in the

demonstration period. The pre-waiver utilization rate of MMHD facilities by Medicare beneficiaries was 170 per 100,000 enrollee population. The post-waiver utilization rate of MMHD facilities by Medicare beneficiaries was 377 per 100,000 enrollee population. Although there was a 222 increase in utilization of MMHD facilities over the two-year demonstration period, overall less than two-tenths of one percent of Medicare enrollees used MMHD facilities in the pre-waiver period, and less than four-tenths of one percent of Medicare enrollees used MMHD facilities in the post-waiver period.

Within any given service area in which an MMHD provider operates, there was considerable variability regarding the utilization rates by Medicare enrollees. In three areas--those served by Facilities 5, 8, and 32--the utilization rate actually decreased. In all other areas, the rates increased during the demonstration period--from a low of a 10 percent increase (Facility 16) to a high of a 320-fold increase (Facility 26). The latter facility increased so much because it only served 2 beneficiaries during the baseline period and 566 in the demonstration period, when the actual number of enrollees decreased.

In analyzing these utilization rates, there are several points that should be kept in mind:

- . The HCFA AE-11 Reports list the number of all Medicare enrollees by State, by zip code, as of a certain date (July 1 of any given year). No reports of Part B enrollees are available, nor is an average of the enrolled population. As such, the data represent single snapshots at points in time of a dynamic phenomenon--enrollment in Medicare. This overstates, by some unknown amount, the number of enrollees eligible for Part B, because not all Part A enrollees are simultaneously enrolled in Part B. This is particularly true in low income areas where Part A enrollees sometimes cannot afford to pay the even low Part B premiums.
- . The zip codes for which enrollee data were abstracted corresponded to those of beneficiaries in the baseline or demonstration period who utilized the MMHD facilities. In some instances, MMHD facilities served geographic areas larger than the zip code areas selected, although there were no beneficiary users from the larger area. In other instances, larger areas were constructed than the stated boundaries of the facility's service area.

- . In including the entire enrollee population for each zip code area selected, it was assumed that each member of the population had an equal probability of using MMHD facility services and that MMHD facility services were equally available throughout these areas. Alternatively, it could be true that the distribution of potential MMHD-type facility users was not uniform throughout the zip code-defined geographic areas; hence, some weighting of areas could be performed. The latter was beyond the scope of this project.
- . Using figures on the enrolled population, itself, overstates the actual number of potential users of MMHD facility services because beneficiaries are a subset of the enrolled population. That is, a beneficiary is defined as an enrollee who has used Medicare benefits. Once again, however, there was no basis available for adjusting the reported data to take this into account.
- . Utilization data (the numerator) were for the entire two-year baseline and demonstration periods, and enrollment data (the denominator) were a point prevalence as of July 1 in a given year (averaged over two years, in the case of the demonstration period). As such, the numerators and denominators represent different bases for calculation, although the baseline and demonstration ratios were comparable.

Given these points, the data should be viewed as only general, relative indications of utilization of MMHD facilities by the Medicare enrollees in both the pre- and post-waiver periods.

(2) Did The Proportion Of The Site's Ambulatory Mental Health Caseloads Who Were Beneficiaries Differ In The Pre-Waiver And Post-Waiver Periods?

Exhibit 54 shows an analysis of the pre- and post-waiver proportions of the caseloads comprised by beneficiaries in MMHD facilities. The data in the exhibit were derived from the Quarterly Statistical Reports. The exhibit shows the following:

- . Baseline Period--12.4 percent of the CMHC caseloads, 14.0 percent of the AMHC caseloads, and 22.2 percent of the PHP caseloads were composed of Medicare beneficiaries. Overall, 13.5 percent of MMHD caseloads were composed of Medicare beneficiaries.

The range for CMHCs was 0.0 percent (Facility 6) to 29.8 percent (Facility 5); for AMHCs was 3.8 percent (Facility 17) to 80 percent (Facility 27); and for PHPs was 0.0 percent (Facilities 40 and 41) to 44.5 percent (Facility 31).

Demonstration Period--8.6 percent of the CMHC caseloads, 16.5 percent of the AMHC caseloads, and 27.8 percent of the PHP caseloads were composed of Medicare beneficiaries (averaged across the eight demonstration quarters). Overall, 11.4 percent of MMHD caseloads were composed of Medicare beneficiaries (for those reporting for all quarters). The range for CMHCs was 1.3 percent (Facility 13) to 78.4 percent (Facility 6); for AMHCs was 0.3 percent (Facility 30) to 82 percent (Facility 27); and for PHPs was 10.9 percent (Facility 37) to 70.7 percent (Facility 40).

There was an overall decrease in the proportion of Medicare beneficiaries served by demonstration facilities from the baseline to the demonstration. This means that, although a greater number of beneficiaries were served in the demonstration period, caseloads of all clients grew at a faster rate. However, the proportions of beneficiaries served in AMHCs and PHPs increased from the baseline to the demonstration.

(3) Were There Differences In The Overall Demographic Characteristics Of The Site's Beneficiary Caseloads From The Pre-Waiver To Post-Waiver Periods?

This section describes selected characteristics of the Medicare beneficiary population served by demonstration facilities in the Baseline Only period, the Demonstration Only period, and the Baseline and Demonstration period. Included are statistical descriptions of the following beneficiary characteristics, by type of facility, for the two time periods: age, sex, race, marital status, some versus no previous mental health treatment, living arrangement, referral source, diagnosis, source of income, monthly income amount, potential payment source, and self-payment level. Pre-demonstration/post-demonstration differences in these characteristics are examined. The analyses of characteristics reflect data on the following: ^{1/}

^{1/} It should be noted that there are additional beneficiaries who entered treatment in the demonstration period for whom demographic data were not obtained. Pre-waiver eligibility was verified for all beneficiaries included in the database and subsequent analysis. In all analyses, there are some missing values. Consequently, the n's upon which the analyses were undertaken are always noted.

- . 11,680 beneficiaries are represented in the database with cover-sheet information (name, HIC, ID).
- . 11,234 beneficiaries had some characteristics data (demographics).
 - 5,933 of these beneficiaries entered treatment before April 15, 1981.
 - 5,301 of these beneficiaries entered treatment after April 15, 1981.
- . 10,741 beneficiaries had services data (either from Macro field visits or from ODR billing tapes).
 - 1,139 of these had services prior to April 15, 1981, only (Baseline Only group).
 - 6,638 of these had services subsequent to April 15, 1981, only (Demonstration Only group).
 - 2,964 of these had services in both the baseline and demonstration periods (Baseline and Demonstration group).
- . 446 beneficiaries did not have characteristics data.
- . 939 beneficiaries did not have services data.

In reviewing each set of tables, it should be noted that statistical tests were performed comparing each group to another. The notations for the results of the tests of significance refer to the analysis as follows:

- . Baseline Only compares the Baseline Only group to the Baseline and Demonstration group.
- . Demonstration Only compares the Baseline Only group to the Demonstration Only group.
- . Baseline and Demonstration compares the Demonstration Only group to the Baseline and Demonstration group.

In addition, the specific notations are as follows:

- . NS means not significant.
- * means significant at less than the .05 level of probability.
- ** means significant at less than the .01 level of probability.
- *** means significant at less than the .001 level of probability.

Three-Group Analysis

Age

Exhibit 55 shows the distribution of Medicare beneficiaries served in the demonstration facilities by age. Highlights of the findings follow:

- . Baseline Only Group--More than one-half of the beneficiaries served in CMHC-OPs (63 percent), CMHC-PHs (55 percent), and AMHCs (69 percent) were 65 and over. However, 61 percent of those served in PHPs were under 65. The median age was 68 years.
- . Demonstration Only Group--Except for AMHCs (26 percent), more than one-half of the beneficiaries entering treatment in CMHC-OPs (51 percent), CMHC-PHs (54 percent), and AMHCs (74 percent) were under age 65. The median age was 67 years.
- . Baseline and Demonstration Group--More than one-half of the beneficiaries served in CMHC-OPs (63 percent), CMHC-PHs (56 percent), AMHCs (51 percent), and PHPs (88 percent) were under age 65. The median age was 58 years.
- . There is a significant difference in the age of beneficiaries served in all types of demonstration facilities among the three groups. These differences reflect that the majority of beneficiaries served in the Baseline Only and Demonstration Only groups were elderly, whereas the majority served in the Baseline and Demonstration Group were the younger, disabled Medicare population. Such differences were also discernible for CMHC-OP and for AMHC clients (the elderly) and CMHC-PH and PHP clients (the disabled). The distributional differences are also borne out by the median age differences.

Sex

Exhibit 56 shows the distribution of Medicare beneficiaries served in the demonstration facilities by sex. Highlights of the findings follow:

- . Baseline Only Group--Overall, the majority of beneficiaries served were female for all types of facilities and for the 65 and over population. The majority of those under 65 served were male, except in AMHCs (46 percent).

- . Demonstration Only Group--The majority of beneficiaries under age 65 entering treatment were male (57 percent) and over age 65 were female (67 percent). Overall, in all facility types, the majority of beneficiaries entering treatment were female (57 percent), except for PHPs in which the majority were male (51 percent).
- . Baseline And Demonstration Group--Except for PHPs (43 percent), the majority of beneficiaries served in CMHC-OPs (52 percent), CMHC-PHs (56 percent), and AMHCs (55 percent) were female. In all instances, the majority (58 percent) of beneficiaries served under age 65 were male and over age 65 (69 percent) were female.
- . Overall, the proportion of female beneficiaries served in MMHD facilities was significantly different (p less than .001) in the Demonstration Only group from the Baseline and Demonstration group for all facility types, and between the Baseline Only and Demonstration Only groups (p less than .05). The only other notable significant differences were between the Baseline Only and the other two groups specifically regarding the elderly.

Race

Exhibit 57 shows the distribution of Medicare beneficiaries served in demonstration facilities by race. Highlights of the findings follow:

- . Baseline Only Group--The majority of beneficiaries served were white (83 percent) across all facility types and age groups.
- . Demonstration Only Group--The majority (82 percent) of beneficiaries were white, reflecting an increase in the proportion of such beneficiaries across all facility types, except for PHPs.
- . Baseline and Demonstration Group--The majority of beneficiaries were white (74 percent); minority group members composed about one-quarter (26 percent) of the beneficiary population served.
- . There were proportionately fewer minority group members in the Demonstration Only group that were 65 and over (13 percent) than in the Baseline Only (15 percent) and the Baseline and Demonstration (19 percent) groups. There was a higher proportion of minority group members among those under 65.

Marital Status

Exhibit 58 shows the distribution of Medicare beneficiaries in demonstration facilities by marital status. Highlights of the findings follow:

- . Baseline Only Group--Married and widowed persons composed the majority of beneficiaries aged 65 and over served (75 percent), whereas single and married persons composed the majority of beneficiaries under 65 served (63 percent).
- . Demonstration Only Group--Single and married persons composed the majority of beneficiaries under age 65 entering treatment in all facilities (68 percent); married and widowed persons composed the majority of beneficiaries over age 65 (78 percent).
- . Baseline And Demonstration Group--Single and married persons composed the majority of beneficiaries under age 65 in all facilities (70 percent); married and widowed persons composed the majority of beneficiaries over age 65 served (65 percent).
- . Of beneficiaries under 65, the proportion of single persons in PHPs was significantly different between the Baseline Only and the Baseline and Demonstration groups (p less than .001) and the Demonstration Only and the Baseline and Demonstration groups (p less than .05). Similarly, among the elderly in AMHCs, there were significant differences in the proportions of widowed individuals.

Previous Mental Health Treatment

Exhibit 59 shows the distribution of Medicare beneficiaries served in demonstration facilities by previous mental health treatment status. Previous treatment means treatment for a mental disorder by some other provider, prior to treatment in a demonstration facility. Highlights of the findings follow:

- . Baseline Only Group--The majority of beneficiaries across all facility types (81 percent) had some previous mental health treatment. Except for PHPs, the elderly had a smaller proportion (but still the majority) with some previous mental health treatment.

- . Demonstration Only Group--Slightly less than two-thirds of the beneficiaries had some type of previous mental health treatment. Of those 65 and over, slightly more than one-half had some type of previous treatment. More than 80 percent of those under 65 had some previous mental health treatment.
- . Baseline And Demonstration Group--More than 80 percent of the beneficiaries had some type of previous mental health treatment. Of those who had previous mental health treatment, 65 percent were under age 65. In contrast, only 43 percent of those who had no previous treatment were under 65. Nearly all beneficiaries served in PHPs had some type of previous mental health treatment.
- . There was a significant difference in the proportion of beneficiaries with some previous mental health treatment in all facilities between the Baseline Only group and the other two groups. There were significantly fewer beneficiaries in the Demonstration Only group with some previous treatment than in the Baseline and Demonstration group (66 to 84 percent).

Of beneficiaries 65 and over, there was a significant difference between these two groups in the proportion without some type of previous treatment (p less than .001) and in all facilities except PHPs. These findings show the demonstration reaching a previously untreated population.

Exhibits 60, 61, and 62 show the distribution of Medicare beneficiaries served in demonstration facilities by source of previous mental health treatment for all beneficiaries, those under 65, and those 65 and over, respectively. Highlights of the findings follow:

- . Baseline Only Group--Thirty-three percent of the group were treated previously in a State mental hospital. Of those under 65, 38 percent were treated previously in a State mental hospital; whereas, for those 65 and over, 28 percent had been. PHP clients evidenced the highest percentage of previous hospitalization, not only in State mental hospitals but county mental hospitals, general hospital psychiatric units, other hospitals, and Veterans Administration hospitals as well.
- . Demonstration Only Group--Thirty percent of the group were treated previously in a State mental hospital; 20 percent in a general hospital psychiatric unit. Of those under 65, 39 percent were treated previously in a State mental hospital; 26 percent were treated in a general hospital psychiatric unit. Of those 65 and over, 19 percent were treated previously in a State mental hospital and 12 percent in a general hospital psychiatric unit.

- . Baseline and Demonstration Group--Fifty-two percent were treated previously in a State mental hospital; 24 percent in a general hospital psychiatric unit. Of those under 65, 55 percent were treated previously in a State mental hospital; 28 percent in a general hospital psychiatric unit. Of those 65 and over, 47 percent were treated previously in a State mental hospital, and 17 percent in a general hospital psychiatric unit.
- . The patterns of previous psychiatric care showed a significantly higher proportion of previous hospitalization among the Baseline and Demonstration group when compared to the two other groups, reflecting the membership of the chronically mentally ill among this group. Among the elderly, the Demonstration Only group showed a significantly lower proportion of previous hospitalization when compared to the Baseline Only group.

Living Arrangement

Exhibits 63, 64, and 65 show the distribution of Medicare beneficiaries served in demonstration facilities by living arrangement, for all beneficiaries, those under 65, and those 65 and over, respectively. Highlights of the findings follow:

- . Baseline Only Group--Fifty-six percent of all beneficiaries lived in their own home or apartment, or with relatives. Thirty-nine percent of all PHP clients resided in some type of congregate living situation. The same patterns were evident for clients both over and under 65.
- . Demonstration Only Group--Nearly two-thirds of all beneficiaries lived in their own home or apartment, or with relatives. Seventeen percent of those under 65 resided in some type of congregate living arrangement, and 15 percent of those 65 and over resided in a skilled nursing facility.
- . Baseline And Demonstration Group--Nearly two-thirds of all beneficiaries lived in their own home or apartment, or with relatives. Forty-three percent of beneficiaries served by PHPs resided in some sort of congregate living arrangement.
- . Among AMHC clients, a significantly lower proportion resided in ICFs and SNFs in the Demonstration Only and Baseline and Demonstration groups, when compared to the Baseline Only group. This was also evident for both age groups. Among CMHC-PH, a significantly higher proportion lived with relatives in the Baseline and Demonstration group, when compared to the other two groups.

Referral Source

Exhibits 66, 67, and 68 show the percentage of Medicare beneficiaries served in demonstration facilities who were referred from specific sources, for all beneficiaries, those under 65, and those 65 and over, respectively. Highlights of the findings follow:

- . Baseline Only Group--More than one-half of the referrals among all beneficiaries were from self, family and friends, other mental health practitioners, and State mental hospitals.
- . Demonstration Only Group--More than one-half of the referrals among all beneficiaries were from self, family and friends, and a social service agency.
- . Baseline And Demonstration Group--Nearly two-thirds of the referrals among all beneficiaries were from self, State mental hospital, family and friends, or social service agency.
- . There was a significantly larger (p less than .001) proportion of referrals from self, family and friends, and other mental health centers among Demonstration Only beneficiaries, when compared to Baseline Only beneficiaries. Conversely, there was a significantly smaller (p less than .001) proportion of referrals from State mental hospitals and other mental health practitioners when comparing these two groups. The same patterns were observed when comparing the Baseline and Demonstration group to the Baseline Only group, except there was also a significantly larger (p less than .001) proportion of referrals from hospitals in the former group. Among those under 65, there were significantly larger (p less than .001) proportions of referrals from ICFs and SNFs in the Demonstration Only group, when compared to the Baseline and Demonstration group. Among the elderly, this was also evidenced for SNFs.

Primary Diagnosis

Exhibit 69 shows the distribution of Medicare beneficiaries served in demonstration facilities by primary diagnosis. Highlights of the findings follow:

- . Baseline Only Group--Thirty-five percent of the beneficiaries under 65 were diagnosed as having some schizophrenic disorder. Organic mental disorders, anxiety, somatoform and dissociative disorders, adjustment disorders, and affective disorders accounted for 62 percent of the diagnoses among the elderly.

. Demonstration Only Group--Approximately 40 percent of beneficiaries under age 65 were diagnosed as having some schizophrenic disorder. Organic mental disorders and adjustment disorders accounted for one-half of diagnoses among those 65 and over.

. Baseline And Demonstration Group--The majority (58 percent) of beneficiaries under age 65 were diagnosed as having some schizophrenic disorder. Schizophrenic disorders, anxiety, somatoform and dissociative disorders, and affective disorders accounted for the majority of the diagnoses among those beneficiaries 65 and over; schizophrenic disorders accounted for more than one-quarter of the diagnoses among the elderly in PHPs.

. For those under 65 in the Baseline and Demonstration Group, there was a significantly higher (p less than .001) proportion of beneficiaries with a schizophrenic disorder, when compared to the other two groups. Among the elderly in the Baseline and Demonstration group, there was a significantly higher (p less than .001) proportion of beneficiaries with a schizophrenic disorder, when compared to the other two groups. Conversely, there was a significantly higher (p less than .001) proportion of beneficiaries in the Demonstration Only group diagnosed as having an adjustment disorder, when compared to the other two groups. In general, these patterns were observed across facility types, except for the under-65 population in CMHC-PHs and PHPs and 65 and over population in AMHCs and PHPs.

Income Source

Exhibits 70, 71, and 72 show the distribution of Medicare beneficiaries served in demonstration facilities by source of income, for all beneficiaries, for those under 65, and those 65 and over, respectively. Highlights of the findings follow:

. Baseline Only Group--The vast majority (84 percent) of beneficiaries had Social Security as a source of income, with few other sources except public assistance (9 percent). Eighteen percent of the under-65 beneficiaries had public assistance as a source of income.

. Demonstration Only Group--The vast majority (95 percent) of beneficiaries had Social Security as a source of income, with few other sources.

. Baseline And Demonstration Group--The vast majority (97 percent) of beneficiaries had Social Security as a source of income, with few other sources except for public assistance (13 percent).

- . The proportion of all beneficiaries with Social Security as a source of income was significantly lower (p less than .001) in the Baseline Only group, when compared to the other two groups. This may have been more a function of demonstration facilities not recording income sources rather than a fact, as the relative small n's would imply. The proportion of beneficiaries with public assistance as a source of income was significantly lower (p less than .001) in the Demonstration group, when compared to the other two groups, overall and for both age groups.

Exhibits 73, 74, and 75 show the distribution of Medicare beneficiaries served in demonstration facilities by monthly income level, for all beneficiaries, those under age 65, and those 65 and over, respectively. Highlights of the findings follow:

- . Baseline Only Group--The median income for all beneficiaries was \$359 per month; for those under age 65, it was \$376; and for those 65 and over, it was \$339.
- . Demonstration Only Group--The median monthly income for all beneficiaries was \$359; for those under age 65, it was \$378, and for those 65 and over, it was \$466.
- . Baseline And Demonstration Group--The median income for all beneficiaries was \$327; for those under age 65, it was \$331; and for those 65 and over, it was \$318.
- . The monthly income for all beneficiaries was significantly higher in the Demonstration Only group (p less than .001), irrespective of age, when compared to the other two groups. However, this may be as much a function of time of entry into treatment as an actual higher monthly income amount.

Potential Payor Source

Exhibits 76, 77, and 78 show the distribution of Medicare beneficiaries served in demonstration facilities by potential payor source, for all beneficiaries, those under 65, and those 65 and over, respectively. Highlights of the findings follow:

- . Baseline Only Group--Forty-five percent of the beneficiaries had Medicaid as a payment source, 39 percent had self-pay, and 27 percent had Title XX. Twenty-one percent of PHP beneficiaries--all elderly--had self-pay as a payment source.
- . Demonstration Only Group--Forty-four percent of the beneficiaries had Medicaid as a potential payor source, 25 percent self-pay, 21 percent Title XX, and 19 percent private insurance.
- . Baseline And Demonstration Group--More than one-half of the beneficiaries had Medicaid as a potential payor source, more than one-third self-pay, and almost one-third Title XX. Only three percent of PHP beneficiaries had themselves as a potential payor source.
- . There was a significantly higher proportion (p less than .001) of beneficiaries (primarily the elderly) with private insurance as a payment source in the Demonstration Only group, when compared to the other two groups. Conversely, self-pay and Title XX were significantly lower.

Exhibits 79, 80, and 81 show the distribution of Medicare beneficiaries served in demonstration facilities with self-pay as a potential payor source by self-pay payment level for all beneficiaries, those under 65, and those 65 and over, respectively. The exhibits show that the majority of beneficiary self-payment levels were 10 percent or less of charges. The percentages were higher in the Baseline Only group, compared to the other two groups, irrespective of age.

Summary

The comparisons of beneficiary characteristics among the three groups show that the demonstration reached a beneficiary population that has not been previously treated. This population is, in general, elderly, white, female, living at home or with friends and on Social Security, and less severely disordered than the population entering or served in the baseline period.



- . For AMHCs, the average proportion of ambulatory service encounters attributable to beneficiaries in MMHD facilities through the demonstration was 10.2 percent, although higher the second year. The range across facilities was 2.4 percent for Facility 30 to 45.9 percent for Facility 27.
- . Overall, the average proportion of ambulatory service encounters attributable to beneficiaries in MMHD facilities through the demonstration was 8.5 percent--a figure consistent with but somewhat lower than the proportion of facility caseloads composed of beneficiaries.

Those facilities showing increasing proportions of Medicare encounters either increased the raw count of encounters attributable to beneficiaries, or decreased the total number of encounters to all clients. In any event, there was a substantial increase in the proportion of encounters, and hours of partial hospitalization attributable to beneficiaries throughout the course of the demonstration.

Another way of looking at encounters is by provider type, as shown in Exhibit 84. This exhibit shows the distribution of ambulatory service encounters by provider type, and facility type, and total; the data emanate from the ODR Cost Reports. The exhibit shows that, although there was an overall increase in the proportion of encounters attributable to beneficiaries, the increases were most dramatic for QMHPs. For example, although beneficiaries accounted for 8.5 percent of total encounters, they accounted for 15.6 percent of encounters with psychiatrists, 11.8 percent of encounters with nonpsychiatric physicians, and 9.5 percent of encounters with psychiatric social workers.

(5) Were The Sites Reaching A New Population Under The Demonstration, Or Were They Providing Additional Services Charged To Medicare To The Same Population?

The three-group comparisons of beneficiary characteristics showed that the demonstration reached a beneficiary population that was not previously treated. This population was, in general, elderly, white, female, living at home or with friends and on Social Security, and with less severe

mental disorders than the population served in the baseline period. However, the demonstration facilities continued to serve large numbers of beneficiaries during the demonstration period who were admitted during the baseline period. These latter beneficiaries could be characterized generally as a younger, chronically mentally ill population.

As our analysis of beneficiary utilization showed, there is no evidence that facilities provided additional services charged to Medicare to the same population in CMHC-OPs and AMHCs. However, it appears that, in CMHC-PHs and PHPs, additional services were indeed provided to the same population as well as to the new population of beneficiaries entering treatment during the demonstration period.

ANALYSIS OF MEDICARE ENROLLEE BASELINE AND
DEMONSTRATION UTILIZATION OF MMHD FACILITIES

| Facility/Type | BASELINE UTILIZATION | | | DEMONSTRATION UTILIZATION | | |
|---------------|--|---|---|--|---|---|
| | Number of Medicare Beneficiaries Served ^{1/} | Number of Medicare Enrollees in Service Area ^{2/} | Utilization Rate/100,000 Medicare Enrollee Population | Number of Medicare Beneficiaries Served ^{3/} | Number of Medicare Enrollees in Service Area ^{4/} | Utilization Rate/100,000 Medicare Enrollee Population |
| <u>CMHC</u> | | | | | | |
| 1 | 52 | 57,273 | 91 | 340 | 63,846 | 533 |
| 2 | 291 | 27,222 | 1,069 | 537 | 34,998 | 1,534 |
| 3 | 69 | 13,436 | 514 | 132 | 13,512 | 977 |
| 4 | 50 | 61,022 | 82 | 242 | 70,612 | 343 |
| 5 | 318 | 15,463 | 2,057 | 318 | 16,265 | 1,955 |
| 6 | 89 | 27,520 | 323 | 225 | 27,175 | 828 |
| 7 | 191 | 53,641 | 356 | 323 | 53,451 | 604 |
| 8 | 286 | 11,128 | 2,570 | 159 | 11,263 | 1,412 |
| 9 | 491 | 113,298 | 433 | 1,153 | 134,451 | 858 |
| 10 | 22 | 11,756 | 187 | 139 | 13,364 | 1,040 |
| 11 | 225 | 26,378 | 853 | 533 | 27,748 | 1,921 |
| 12 | 2 | 104,112 | 2 | 307 | 103,184 | 298 |
| 13 | 75 | 24,107 | 311 | 186 | 26,088 | 713 |
| 14 | 200 | 53,787 | 372 | 293 | 61,557 | 476 |
| 15 | -- | -- | -- | -- | -- | -- |
| Total CMHCs | 2,361 | 600,143 | | 4,887 | 657,514 | |
| Average CMHCs | 168.6 | 42,867 | 393 | 349 | 46,965 | 743 |
| <u>AMHC</u> | | | | | | |
| 16 | 38 | 13,878 | 274 | 76 | 25,809 | 294 |
| 17 | 167 | 92,962 | 180 | 374 | 97,227 | 385 |
| 18 | 163 | 14,956 | 1,090 | 287 | 15,733 | 1,824 |
| 19 | -- | -- | -- | -- | -- | -- |
| 20 | 4 | 61,270 | 7 | 97 | 63,257 | 153 |
| 21 | 93 | 32,482 | 286 | 196 | 38,203 | 513 |
| 22 | -- | -- | -- | -- | -- | -- |
| 23 | 40 | 75,870 | 53 | 237 | 77,732 | 305 |
| 24 | 71 | 6,856 | 1,036 | 150 | 7,026 | 2,135 |
| 25 | 159 | 19,601 | 811 | 269 | 20,398 | 1,319 |
| 26 | 2 | 90,231 | 2 | 566 | 88,541 | 639 |
| 27 | 397 | 336,882 | 118 | 1,118 | 343,340 | 326 |
| 28 | 123 | 20,599 | 597 | 230 | 21,022 | 1,094 |
| 29 | -- | -- | -- | -- | -- | -- |
| 30 | 31 | 283,778 | 11 | 206 | 339,013 | 61 |
| Total AMHCs | 1,288 | 1,049,365 | | 3,806 | 1,137,301 | |
| Average AMHCs | 107.3 | 87,447 | 123 | 317 | 94,775 | 335 |
| <u>PHP</u> | | | | | | |
| 31 | 123 | 113,386 | 108 | 199 | 113,051 | 176 |
| 32 | 50 | 30,548 | 164 | 32 | 31,540 | 101 |
| 33 | 22 | 28,444 | 77 | 97 | 29,918 | 324 |
| 34 | -- | -- | -- | -- | -- | -- |
| 35 | 16 | 12,691 | 126 | 18 | 13,110 | 137 |
| 36 | 37 | 75,572 | 49 | 71 | 75,497 | 94 |
| 37 | 15 | 146,175 | 10 | 70 | 145,395 | 48 |
| 38 | 44 | 72,156 | 61 | 74 | 67,661 | 109 |
| 39 | 21 | 31,927 | 66 | 37 | 35,396 | 105 |
| 40 | 14 | 50,872 | 28 | 132 | 51,795 | 255 |
| 41 | 22 | 4,653 | 473 | 30 | 4,724 | 635 |
| 42 | 23 | 2,849 | 807 | 39 | 2,856 | 1,366 |
| 43 | 16 | 21,391 | 75 | 30 | 22,040 | 136 |
| 44 | 28 | 161,240 | 17 | 65 | 158,852 | 41 |
| 45 | 14 | 4,272 | 328 | 29 | 4,350 | 667 |
| Total PHPs | 445 | 756,176 | | 923 | 756,185 | |
| Average PHPs | 31.8 | 54,013 | 59 | 66 | 54,013 | 122 |
| Grand Total | 4,094 | 2,405,684 | | 9,616 | 2,551,000 | |
| Grand Average | 102.3 | 60,142 | 170 | 240 | 63,775 | 377 |

^{1/} From MMHD evaluation database, representing beneficiaries with SCRs in the baseline period.^{2/} Number of Medicare Part A enrollees as of 7/1/80, with address zip codes corresponding to the zip codes of beneficiaries served by MMHD facilities.^{3/} From MMHD evaluation database, representing beneficiaries with SCRs in the demonstration period.^{4/} Average number of Medicare Part Enrollees as of 7/1/81 and 7/1/82, with address zip codes corresponding to the zip codes of beneficiaries served by MMHD facilities.

HHS, Office of the Secretary

PROPORTION OF BENEFICIARIES TO TOTAL CASELOAD BY
FACILITY, FROM QUARTERLY STATISTICAL REPORTS
BASELINE

| Facility/ Type | BASELINE | | |
|-------------------|---------------------------|-------------------|------|
| | Medicare Beneficiaries | Total Caseload | % * |
| <u>CMHCs</u> | | | |
| 1 | 173 | 2,287 | 7.6 |
| 2 | 231 | 3,741 | 6.2 |
| 3 | 51 | 715 | 7.1 |
| 4 | N/AV | N/AV | -- |
| 5 | 793 | 2,664 | 29.8 |
| 6 | 0 | 162 | 0.0 |
| 7 | 133 | 717 | 18.5 |
| 8 | 50 | 857 | 5.8 |
| 9 | 565 | 2,463 | 22.9 |
| 10 | 14 | 2,798 | 0.5 |
| 11 | N/AV | N/AV | -- |
| 12 | 169 | 1,168 | 14.5 |
| 13 | N/A | N/A | -- |
| 14 | N/A | N/A | -- |
| 15 | Dropped Out | -- | -- |
| Total | 2,179 | 17,572 | 12.4 |
| <u>AMHCs</u> | | | |
| 16 | 35 | 820 | 4.3 |
| 17 | 128 | 3,339 | 3.8 |
| 18 | 155 | 883 | 17.6 |
| 19 | Dropped Out | -- | -- |
| 20 | N/AV | N/AV | -- |
| 21 | 70 | 661 | 10.6 |
| 22 | Dropped Out | -- | -- |
| 23 | 32 | 394 | 8.1 |
| 24 | 90 | 780 | 11.5 |
| 25 | 100 | 1,414 | 7.1 |
| 26 | 256 | 1,091 | 23.5 |
| 27 | 676 | 845 | 80.0 |
| 28 | 101 | 1,425 | 7.1 |
| 29 | Dropped Out | -- | -- |
| 30 | N/A | N/A | -- |
| Total | 1,643 | 11,751 | 14.0 |
| <u>PHPs</u> | | | |
| 31 | 106 | 238 | 44.5 |
| 32 | 82 | 443 | 18.5 |
| 33 | 0 | 104 | -- |
| 34 | Dropped Out | -- | -- |
| 35 | 5 | 33 | 15.2 |
| 36 | 36 | 125 | 28.8 |
| 37 | 22 | 257 | 8.6 |
| 38 | 39 | 100 | 39.0 |
| 39 | 21 | 66 | 31.8 |
| 40 | 0 | 20 | 0.0 |
| 41 | 0 | 41 | 0.0 |
| 42 | 19 | 62 | 30.6 |
| 43 | N/AV | N/AV | -- |
| 44 | N/A | N/A | -- |
| 45 | N/A | N/A | -- |
| Total | 330 | 1,489 | 22.2 |
| Grand Total | 4,152 | 30,812 | 13.5 |

* Percent Medicare beneficiaries of total caseload.
 N/AV--Data Not Available
 N/A--Data Not Applicable

EXHIBIT 54(2)

HHS, Office of the Secretary

PROPORTION OF BENEFICIARIES TO TOTAL CASELOAD BY
FACILITY, FROM QUARTERLY STATISTICAL REPORTS
DEMONSTRATION

| Facility/ Type | QUARTER 1 April 15 - June 30, 1981 | | | QUARTER 2 July 1 - September 30, 1981 | | | QUARTER 3 October 1 - December 31, 1981 | | | QUARTER 4 January 1 - March 31, 1982 | | |
|-------------------|---------------------------------------|----------|------|--|----------|------|--|----------|------|---|----------|-------|
| | Medicare | Total | %* | Medicare | Total | %* | Medicare | Total | %* | Medicare | Total | %* |
| | Beneficiaries | Caseload | | Beneficiaries | Caseload | | Beneficiaries | Caseload | | Beneficiaries | Caseload | |
| CMHCs | | | | | | | | | | | | |
| 1 | 191 | 2,211 | 8.6 | 212 | 2,206 | 9.6 | 229 | 2,299 | 10.0 | 261 | 2,350 | 11.1 |
| 2 | 222 | 3,722 | 6.0 | 292 | 3,895 | 7.5 | 320 | 3,834 | 8.3 | 309 | 3,955 | 7.8 |
| 3 | 62 | 729 | 8.5 | 64 | 776 | 8.2 | 76 | 814 | 9.3 | 83 | 782 | 10.6 |
| 4 | N/AV | N/AV | -- | N/AV | N/AV | -- | 77 | 1,820 | 4.2 | 96 | 2,031 | 4.7 |
| 5 | 639 | 2,491 | 25.7 | 492 | 2,402 | 20.5 | 295 | 2,505 | 11.8 | 217 | 1,905 | 11.4 |
| 6 | 101 | 144 | 70.1 | 104 | 147 | 70.7 | 102 | 146 | 69.9 | 107 | 146 | 73.3 |
| 7 | 133 | 690 | 19.3 | 115 | 698 | 16.5 | 108 | 716 | 15.1 | N/AV | N/AV | -- |
| 8 | 59 | 1,001 | 5.9 | 65 | 1,017 | 6.4 | 59 | 1,039 | 5.7 | 72 | 1,172 | 6.1 |
| 9 | 576 | 2,507 | 23.0 | 559 | 2,683 | 20.8 | 586 | 2,708 | 21.6 | 593 | 2,565 | 23.1 |
| 10 | 26 | 2,938 | 0.9 | 38 | 2,982 | 1.3 | 42 | 3,127 | 1.3 | 54 | 3,004 | 1.8 |
| 11 | N/AV | N/AV | -- | 184 | 1,484 | 12.4 | 244 | 1,514 | 16.1 | 277 | 1,670 | 16.6 |
| 12 | 91 | 1,205 | 7.6 | 133 | 1,299 | 10.2 | 167 | 1,377 | 12.1 | 165 | 1,532 | 10.8 |
| 13 | N/A | N/A | -- | N/AV | N/AV | -- | 29 | 4,466 | 0.6 | 79 | 4,633 | 1.7 |
| 14 | N/A | N/A | -- | N/AV | N/AV | -- | N/AV | N/AV | -- | N/AV | N/AV | -- |
| 15 | Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 2,100 | 17,638 | 11.9 | 2,258 | 19,589 | 11.5 | 2,334 | 26,365 | 8.9 | 2,313 | 25,745 | 9.0 |
| AMHCs | | | | | | | | | | | | |
| 16 | 30 | 760 | 3.9 | 30 | 771 | 3.9 | 28 | 736 | 3.8 | 44 | 770 | 5.7 |
| 17 | 160 | 2,921 | 5.5 | 195 | 2,461 | 7.9 | 197 | 2,505 | 7.9 | 187 | 2,196 | 8.5 |
| 18 | 160 | 928 | 17.2 | 169 | 1,156 | 14.6 | 175 | 968 | 18.1 | 181 | 1,068 | 16.9 |
| 19 | Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 20 | N/AV | N/AV | -- | 14 | 183 | 7.7 | 22 | 196 | 11.2 | 32 | 215 | 14.9 |
| 21 | 80 | 556 | 14.4 | 99 | 917 | 10.8 | 108 | 1,303 | 8.3 | 107 | 1,362 | 7.9 |
| 22 | Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 23 | 40 | 374 | 10.7 | 47 | 396 | 11.9 | 68 | 415 | 16.4 | 123 | 519 | 23.7 |
| 24 | 93 | 858 | 10.8 | 108 | 948 | 11.4 | 116 | 1,060 | 10.9 | 142 | 1,310 | 10.8 |
| 25 | 101 | 1,192 | 8.5 | 142 | 1,173 | 12.1 | 147 | 1,184 | 12.4 | 160 | 1,094 | 14.6 |
| 26 | 292 | 1,078 | 27.1 | 329 | 1,165 | 28.2 | N/AV | N/AV | -- | N/AV | N/AV | -- |
| 27 | 701 | 876 | 80.0 | 856 | 1,070 | 80.0 | 822 | 1,027 | 80.0 | 843 | 991 | 85.1 |
| 28 | 104 | 1,507 | 6.9 | 107 | 1,270 | 8.4 | 111 | 1,395 | 8.0 | 109 | 1,522 | 7.2 |
| 29 | Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 30 | N/A | N/A | -- | 0 | 1,441 | 0.0 | 59 | 1,467 | 4.0 | 58 | 1,547 | 3.7 |
| Total | 1,761 | 11,050 | 15.9 | 2,096 | 12,951 | 16.2 | 1,853 | 12,256 | 15.1 | 1,986 | 12,594 | 15.8 |
| PHPs | | | | | | | | | | | | |
| 31 | 113 | 238 | 47.5 | 97 | 218 | 44.5 | 133 | 255 | 52.2 | 138 | 250 | 55.2 |
| 32 | 50 | 348 | 14.4 | 48 | 346 | 13.9 | 33 | 319 | 10.3 | 28 | 255 | 11.0 |
| 33 | 29 | 106 | 27.4 | 29 | 96 | 30.2 | 29 | 100 | 29.0 | 30 | 104 | 28.8 |
| 34 | Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 35 | 8 | 29 | 27.6 | 12 | 33 | 36.4 | 10 | 32 | 31.3 | 12 | 41 | 29.3 |
| 36 | 39 | 127 | 30.7 | 41 | 135 | 30.4 | 41 | 134 | 30.6 | 36 | 124 | 29.0 |
| 37 | 22 | 250 | 8.8 | 27 | 232 | 11.6 | 25 | 222 | 11.3 | 36 | 234 | 15.4 |
| 38 | 30 | 105 | 28.6 | 50 | 108 | 46.3 | 50 | 107 | 46.7 | 40 | 102 | 39.2 |
| 39 | 21 | 62 | 33.9 | 19 | 60 | 31.7 | 22 | 63 | 34.9 | 21 | 60 | 35.0 |
| 40 | 13 | 25 | 52.0 | 23 | 41 | 56.1 | 19 | 37 | 51.4 | 30 | 30 | 100.0 |
| 41 | 21 | 39 | 53.8 | 24 | 42 | 57.1 | 20 | 41 | 48.8 | 20 | 43 | 46.5 |
| 42 | 21 | 67 | 31.3 | 25 | 69 | 36.2 | 26 | 78 | 33.3 | 29 | 77 | 37.7 |
| 43 | 15 | 17 | 88.2 | 23 | 25 | 92.0 | 25 | 27 | 92.6 | 22 | 24 | 91.7 |
| 44 | N/A | N/A | -- | 32 | 373 | 8.6 | 30 | 374 | 8.0 | 38 | 355 | 10.7 |
| 45 | N/A | N/A | -- | N/A | N/A | -- | 14 | 58 | 24.1 | 17 | 57 | 29.8 |
| Total | 382 | 1,413 | 27.0 | 450 | 1,778 | 25.3 | 477 | 1,347 | 25.8 | 497 | 1,756 | 28.3 |
| Grand Total | 4,243 | 30,101 | 14.1 | 4,804 | 34,318 | 14.0 | 4,664 | 40,468 | 11.5 | 4,796 | 40,095 | 12.0 |

* Percent Medicare beneficiaries of total caseload.

N/AV--Data Not Available

N/A--Data Not Applicable

EXHIBIT 34(3)

| Facility/ Type | QUARTER 5 April 1 - June 30, 1982 | | | QUARTER 6 July 1 - September 30, 1982 | | | QUARTER 7 October 1 - December 31, 1982 | | | QUARTER 8 January 1 - April 14, 1983 | | |
|-------------------|--------------------------------------|----------|-------|--|----------|-------|--|----------|-------|---|----------|-------|
| | Medicare | Total | % | Medicare | Total | % | Medicare | Total | % | Medicare | Total | % |
| | Beneficiaries | Caseload | | Beneficiaries | Caseload | | Beneficiaries | Caseload | | Beneficiaries | Caseload | |
| CMHCs | | | | | | | | | | | | |
| 1 | 282 | 2,424 | 11.6 | 212 | 2,624 | 8.1 | 222 | 2,794 | 7.9 | 244 | 2,899 | 8.4 |
| 2 | 309 | 3,978 | 7.8 | 294 | 4,139 | 7.1 | 315 | 4,298 | 7.3 | 353 | 4,505 | 7.3 |
| 3 | 96 | 787 | 12.2 | 108 | 802 | 13.5 | 109 | 831 | 13.1 | 122 | 918 | 13.3 |
| 4 | 100 | 2,272 | 4.4 | 135 | 2,337 | 5.8 | 140 | 2,561 | 5.5 | 136 | 2,721 | 5.0 |
| 5 | 242 | 2,012 | 12.0 | 247 | 2,036 | 12.1 | 271 | 2,105 | 12.9 | 235 | 2,433 | 11.7 |
| 6 | 110 | 113 | 97.3 | 123 | 128 | 97.6 | 123 | 126 | 97.6 | 142 | 157 | 90.4 |
| 7 | N/AV | N/AV | -- | 150 | 777 | 19.3 | 157 | 560 | 28.0 | 135 | 692 | 19.5 |
| 8 | 76 | 1,100 | 6.9 | 79 | 1,117 | 7.1 | 76 | 1,233 | 6.2 | 78 | 1,147 | 6.3 |
| 9 | 534 | 2,356 | 22.7 | 544 | 2,275 | 23.9 | 551 | 2,546 | 21.6 | 549 | 2,596 | 21.1 |
| 10 | 63 | 3,011 | 2.1 | 80 | 2,951 | 2.7 | 96 | 2,528 | 3.8 | 114 | 2,544 | 4.5 |
| 11 | 269 | 1,670 | 16.1 | 300 | 1,642 | 18.3 | 269 | 1,739 | 15.5 | 284 | 1,330 | 15.5 |
| 12 | 139 | 1,580 | 12.0 | 190 | 1,663 | 11.4 | 193 | 1,643 | 11.7 | 228 | 1,761 | 12.9 |
| 13 | 68 | 4,276 | 1.6 | 63 | 4,380 | 1.4 | 66 | 4,713 | 1.4 | 90 | 4,647 | 1.9 |
| 14 | 273 | 14,634 | 1.9 | 246 | 14,661 | 1.7 | 243 | 14,276 | 1.7 | 247 | 14,025 | 1.3 |
| 15 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 2,611 | 40,213 | 6.5 | 2,771 | 41,530 | 6.7 | 2,831 | 41,953 | 6.7 | 3,007 | 42,875 | 7.0 |
| AMHCs | | | | | | | | | | | | |
| 16 | 37 | 724 | 5.1 | 39 | 690 | 5.7 | 40 | 684 | 5.3 | 30 | 698 | 4.3 |
| 17 | 202 | 1,743 | 11.6 | 203 | 2,314 | 8.8 | 193 | 2,358 | 8.2 | 192 | 2,458 | 7.3 |
| 18 | 186 | 1,150 | 16.2 | 198 | 1,159 | 17.1 | 214 | 1,166 | 18.4 | 203 | 1,117 | 13.2 |
| 19 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 20 | 30 | 248 | 12.1 | 35 | 236 | 12.2 | 44 | 315 | 14.0 | 30 | 200 | 11.5 |
| 21 | 131 | 1,511 | 8.7 | 168 | 1,462 | 11.5 | 138 | 1,647 | 11.4 | 217 | 1,384 | 10.0 |
| 22 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 23 | 141 | 446 | 31.6 | 153 | 447 | 34.2 | 163 | 461 | 35.4 | 172 | 338 | 50.9 |
| 24 | 79 | 932 | 8.5 | 84 | 1,004 | 8.4 | 86 | 1,054 | 8.2 | 86 | 1,026 | 3.4 |
| 25 | 174 | 1,244 | 14.0 | 178 | 1,257 | 14.2 | 173 | 1,193 | 14.9 | 183 | 1,124 | 16.3 |
| 26 | N/AV | N/AV | -- | N/AV | N/AV | -- | N/AV | N/AV | -- | N/AV | N/AV | -- |
| 27 | 589 | 1,045 | 85.1 | 788 | 961 | 3.2 | 992 | 1,163 | 34.9 | 1,109 | 1,305 | 85.0 |
| 28 | 116 | 1,659 | 7.0 | 111 | 1,487 | 7.5 | 105 | 1,575 | 6.7 | 87 | 1,692 | 5.1 |
| 29 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 30 | 36 | 1,392 | 6.2 | 94 | 1,338 | 7.0 | 99 | 1,415 | 7.0 | 98 | 1,434 | 6.8 |
| Total | 2,071 | 12,094 | 17.1 | 2,051 | 12,405 | 16.5 | 2,302 | 13,036 | 17.7 | 2,407 | 13,376 | 18.0 |
| PHPs | | | | | | | | | | | | |
| 31 | 130 | 272 | 47.8 | 113 | 264 | 42.3 | 121 | 262 | 46.2 | 107 | 225 | 47.6 |
| 32 | 49 | 264 | 13.6 | 86 | 419 | 20.5 | 133 | 572 | 23.3 | 119 | 537 | 22.2 |
| 33 | 29 | 106 | 27.4 | 35 | 125 | 28.0 | 35 | 120 | 29.2 | 26 | 124 | 21.0 |
| 34 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 35 | 9 | 46 | 19.6 | 10 | 42 | 23.3 | 10 | 51 | 19.6 | 9 | 57 | 15.3 |
| 36 | 33 | 119 | 27.7 | 43 | 113 | 38.1 | 47 | 112 | 42.0 | 47 | 111 | 42.3 |
| 37 | 33 | 229 | 14.4 | 31 | 227 | 13.7 | 29 | 250 | 11.6 | 39 | 274 | 14.2 |
| 38 | 37 | 97 | 38.1 | 37 | 124 | 29.3 | 38 | 123 | 30.9 | 37 | 119 | 31.1 |
| 39 | 20 | 58 | 34.5 | 23 | 67 | 34.3 | 21 | 64 | 32.8 | 25 | 71 | 35.2 |
| 40 | 31 | 31 | 100.0 | 26 | 26 | 100.0 | 39 | 39 | 100.0 | 25 | 25 | 100.0 |
| 41 | 16 | 38 | 42.1 | 16 | 36 | 44.4 | 15 | 33 | 45.4 | 15 | 33 | 45.5 |
| 42 | 30 | 69 | 43.5 | 27 | 66 | 40.9 | 32 | 61 | 52.4 | 26 | 58 | 44.3 |
| 43 | 20 | 22 | 90.9 | 21 | 23 | 91.3 | 21 | 23 | 91.3 | 21 | 23 | 91.3 |
| 44 | 43 | 215 | 20.0 | 48 | 272 | 17.6 | 47 | 297 | 15.8 | 40 | 281 | 14.2 |
| 45 | 17 | 58 | 29.3 | 21 | 70 | 30.0 | 22 | 74 | 29.7 | 23 | 78 | 29.5 |
| Total | 497 | 1,624 | 30.6 | 537 | 1,374 | 28.7 | 610 | 2,081 | 29.3 | 559 | 2,016 | 27.7 |
| Grand Total | 5,179 | 53,931 | 9.6 | 5,339 | 55,809 | 9.6 | 5,743 | 57,070 | 10.1 | 5,973 | 58,267 | 10.3 |

HHS, Office of the Secretary

BENEFICIARY AGE BY FACILITY TYPE--BENEFICIARIES WITH SERVICES IN
BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION

| Age | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|-----------------|---------------|-------------|-------------|----------|------------|--------------------|-------------|-------------|-----------|----------|----------------------------|-------------|-------------|------------|-----------|
| | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP |
| NUMBER OF CASES | 1,155 | 646 | 31 | 333 | 145 | 6,337 | 2,478 | 626 | 2,708 | 525 | 2,923 | 1,244 | 396 | 914 | 369 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Under 21 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.4 | 0.5 | 0.3 | 0.1 | 0.8 | 0.3 | 0.3 | 0.0 | 0.3 | 0.3 |
| 21 - 40 | 14.4 | 11.8 | 25.8 | 12.0 | 29.0 | 17.7 | 21.6 | 26.2 | 8.3 | 37.5 | 23.4 | 22.9 | 25.5 | 18.2 | 35.5 |
| 41 - 50 | 8.1 | 8.4 | 6.5 | 4.5 | 15.2 | 8.7 | 10.5 | 9.4 | 4.9 | 18.5 | 14.5 | 15.7 | 13.4 | 11.2 | 19.8 |
| 51 - 60 | 11.4 | 12.2 | 6.5 | 9.0 | 14.5 | 10.1 | 12.6 | 11.8 | 7.2 | 12.0 | 15.5 | 16.2 | 9.3 | 14.8 | 21.1 |
| 61 - 64 | 4.6 | 4.3 | 6.5 | 5.7 | 2.8 | 6.1 | 6.7 | 6.1 | 5.7 | 5.5 | 7.6 | 8.6 | 7.8 | 6.8 | 5.7 |
| 65 - 70 | 21.0 | 20.6 | 19.4 | 24.0 | 16.6 | 20.4 | 20.3 | 18.7 | 23.1 | 8.4 | 18.0 | 19.5 | 16.2 | 20.6 | 8.4 |
| 71 - 80 | 27.9 | 29.4 | 22.6 | 30.3 | 16.6 | 26.0 | 20.9 | 20.1 | 34.6 | 13.0 | 16.6 | 14.3 | 20.7 | 22.0 | 6.5 |
| 81 - 90 | 11.1 | 12.2 | 9.7 | 11.7 | 4.8 | 9.2 | 5.9 | 6.2 | 13.9 | 4.2 | 3.5 | 2.1 | 6.1 | 4.8 | 2.4 |
| Over 90 | 1.4 *** | 0.8 *** | 3.2 NS | 2.7 ? | 0.7 *** | 1.4 * | 1.0 *** | 1.1 * | 2.1 NS | 0.2 * | 0.8 *** | 0.4 *** | 1.0 NS | 1.4 *** | 0.3 ** |
| Median Age | 68.2 | 68.7 | 66.7 | 69.4 | 55.1 | 67.2 | 63.6 | 62.6 | 71.7 | 47.2 | 58.4 | 57.7 | 62.2 | 63.9 | 48.0 |

* p < .05

** p < .01

*** p < .001

EXHIBIT 56

IHS, Office of the Secretary

BENEFICIARY SEX BY FACILITY TYPE BY AGE--
BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION

| Sex | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|---------------------------------|---------------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|----------------------------|-------|-------|-------|-------|
| | CMHC- | | CMHC- | | PIIP | CMHC- | | CMHC- | | PIIP | CMHC- | | CMHC- | | PIIP |
| | ALL | OP | PH | AMHC | | ALL | OP | PH | AMHC | | ALL | OP | PH | AMHC | |
| All Beneficiaries | | | | | | | | | | | | | | | |
| Number of Cases | 1,146 | 641 | 31 | 331 | 153 | 6,323 | 2,472 | 626 | 2,702 | 523 | 2,913 | 1,241 | 392 | 912 | 368 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Male | 46.8 | 48.4 | 48.4 | 42.6 | 49.0 | 43.5 | 47.3 | 43.0 | 38.5 | 51.2 | 47.6 | 47.9 | 43.9 | 45.0 | 57.0 |
| Female | 53.2 | 51.6 | 51.6 | 57.4 | 51.0 | 56.5 | 53.7 | 57.0 | 61.5 | 48.8 | 52.4 | 52.1 | 56.1 | 55.0 | 43.0 |
| Chi-square test of independence | NS | NS | NS | NS | NS | * | NS | NS | NS | NS | *** | NS | NS | NS | NS |
| Beneficiaries Under Age 65 | | | | | | | | | | | | | | | |
| Number of Cases | 443 | 238 | 14 | 104 | 87 | 2,717 | 1,283 | 337 | 709 | 388 | 1,782 | 792 | 220 | 467 | 303 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Male | 57.3 | 63.9 | 57.1 | 46.2 | 52.9 | 57.4 | 58.1 | 56.4 | 55.7 | 59.0 | 58.0 | 57.3 | 55.0 | 58.5 | 61.4 |
| Female | 42.7 | 36.1 | 42.9 | 53.8 | 47.1 | 42.6 | 41.9 | 43.6 | 44.3 | 41.0 | 42.0 | 42.7 | 45.0 | 41.5 | 38.6 |
| Chi-square test of independence | NS | NS | NS | * | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| Beneficiaries Age 65 and Over | | | | | | | | | | | | | | | |
| Number of Cases | 703 | 403 | 17 | 227 | 56 | 3,606 | 1,189 | 289 | 1,993 | 135 | 1,131 | 449 | 172 | 445 | 65 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Male | 40.1 | 39.2 | 41.2 | 41.0 | 42.9 | 32.9 | 35.7 | 27.3 | 32.4 | 28.9 | 31.1 | 31.2 | 29.7 | 30.8 | 36.9 |
| Female | 59.9 | 60.8 | 58.8 | 59.0 | 57.1 | 67.1 | 64.3 | 72.7 | 67.6 | 71.1 | 68.9 | 68.8 | 70.3 | 69.2 | 63.1 |
| Chi-square test of independence | *** | * | NS | * | NS | *** | NS | NS | * | NS | NS | NS | NS | NS | NS |

* p < .05

** p < .01

*** p < .001



IHS, Office of the Secretary

BENEFICIARY RACE BY FACILITY TYPE BY AGE--
BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION

| Race | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|---------------------------------|---------------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|----------------------------|-------|-------|-------|-------|
| | ALL | OP | PH | AMHC | PIIP | ALL | OP | PH | AMHC | PIIP | ALL | OP | PH | AMHC | PIIP |
| All Beneficiaries | | | | | | | | | | | | | | | |
| Number of Cases | 946 | 451 | 31 | 323 | 141 | 5,293 | 2,139 | 492 | 2,200 | 462 | 2,798 | 1,217 | 386 | 837 | 358 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| White | 82.8 | 85.3 | 90.3 | 83.0 | 72.0 | 82.4 | 76.0 | 82.5 | 89.3 | 78.6 | 74.4 | 65.2 | 75.6 | 84.8 | 79.9 |
| Black | 12.4 | 6.7 | 0.0 | 15.8 | 25.5 | 13.8 | 16.7 | 11.9 | 9.9 | 20.8 | 21.9 | 29.4 | 16.6 | 14.3 | 19.8 |
| Asian | 0.7 | 1.3 | 0.0 | 0.0 | 0.7 | 0.5 | 0.6 | 2.6 | 0.1 | 0.2 | 0.2 | 0.3 | 0.5 | 0.1 | 0.0 |
| American Indian, Alaskan | 0.5 | 0.9 | 0.0 | 0.0 | 0.7 | 0.3 | 0.6 | 0.4 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 |
| Hispanic | 3.6 | 5.8 | 9.7 | 1.2 | 1.4 | 3.0 | 6.1 | 2.6 | 0.6 | 0.4 | 3.4 | 4.9 | 7.3 | 0.7 | 0.3 |
| Chi-square test of independence | *** | *** | NS | NS | * | NS | *** | * | * | NS | *** | ** | *** | ** | NS |
| Beneficiaries Under Age 65 | | | | | | | | | | | | | | | |
| Number of Cases | 398 | 197 | 14 | 101 | 86 | 2,259 | 1,090 | 255 | 554 | 360 | 1,718 | 774 | 216 | 435 | 293 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| White | 79.1 | 82.2 | 78.6 | 82.2 | 68.6 | 76.6 | 72.9 | 76.9 | 84.1 | 75.8 | 69.7 | 61.0 | 65.3 | 87.5 | 76.8 |
| Black | 14.1 | 7.6 | 0.0 | 16.8 | 27.9 | 18.5 | 20.1 | 13.3 | 14.4 | 23.3 | 26.0 | 33.6 | 22.2 | 16.3 | 22.9 |
| Asian | 0.3 | 0.0 | 0.0 | 0.0 | 1.2 | 1.0 | 0.6 | 4.7 | 0.4 | 0.3 | 0.2 | 0.4 | 0.5 | 0.0 | 0.0 |
| American Indian, Alaskan | 1.3 | 2.0 | 0.0 | 0.0 | 1.2 | 0.3 | 0.4 | 0.8 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Hispanic | 5.3 | 8.1 | 21.4 | 1.0 | 1.2 | 3.7 | 6.0 | 4.3 | 0.9 | 0.6 | 4.1 | 4.9 | 12.0 | 1.1 | 0.3 |
| Chi-square test of independence | *** | *** | NS | NS | NS | ** | *** | * | NS | NS | *** | * | *** | NS | NS |
| Beneficiaries Age 65 and Over | | | | | | | | | | | | | | | |
| Number of Cases | 548 | 254 | 17 | 222 | 55 | 3,034 | 1,049 | 237 | 1,646 | 102 | 1,080 | 443 | 170 | 402 | 65 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| White | 85.4 | 87.8 | 100.0 | 83.3 | 78.2 | 86.7 | 79.2 | 88.6 | 91.1 | 88.2 | 81.0 | 72.7 | 88.8 | 87.3 | 93.8 |
| Black | 11.1 | 5.9 | 0.0 | 15.3 | 21.8 | 10.3 | 13.2 | 10.0 | 8.4 | 11.8 | 15.5 | 22.1 | 9.4 | 12.2 | 6.2 |
| Asian | 1.1 | 2.4 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 0.4 | 0.0 | 0.0 | 0.2 | 0.0 | 0.6 | 0.2 | 0.0 |
| American Indian, Alaskan | -- | -- | -- | -- | -- | 0.3 | 0.8 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 |
| Hispanic | 2.4 | 3.9 | 0.0 | 0.5 | 0.0 | 2.5 | 6.3 | 0.8 | 0.4 | 0.0 | 2.3 | 5.0 | 1.2 | 0.2 | 0.0 |
| Chi-square test of independence | ** | *** | NS | NS | NS | ** | NS | NS | ** | NS | *** | *** | NS | NS | NS |

* p < .05

** p < .01

*** p < .001

EXHIBIT 58

HHS, Office of the Secretary

BENEFICIARY MARITAL STATUS BY FACILITY BY AGE--
BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION

| Marital Status | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | | | | |
|---------------------------------|---------------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|----------------------------|-----|-------|-------|-------|-------|-------|-----|
| | ALL | CMHC- | OP | PH | AMHC | PHP | ALL | CMHC- | OP | PH | AMHC | PHP | ALL | CMHC- | OP | PH | AMHC | PHP |
| All Beneficiaries | | | | | | | | | | | | | | | | | | |
| Number of Cases | 880 | 450 | 30 | 328 | 72 | | 5,362 | 2,099 | 492 | 2,314 | 457 | | 2,893 | 1,208 | 387 | 895 | 353 | |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |
| Single | 24.1 | 18.2 | 23.3 | 26.5 | 50.0 | | 24.9 | 23.5 | 32.5 | 18.5 | 56.0 | | 35.3 | 30.5 | 38.5 | 29.6 | 67.7 | |
| Married | 29.8 | 36.2 | 43.3 | 23.2 | 13.9 | | 27.7 | 31.1 | 20.0 | 29.2 | 12.9 | | 23.6 | 26.5 | 18.6 | 29.6 | 7.1 | |
| Widowed | 27.0 | 25.6 | 23.3 | 33.2 | 9.7 | | 30.2 | 24.0 | 26.2 | 40.1 | 12.5 | | 18.4 | 16.4 | 22.0 | 23.9 | 10.5 | |
| Separated | 6.4 | 6.4 | 3.4 | 5.5 | 11.1 | | 4.5 | 5.3 | 5.9 | 3.2 | 5.0 | | 6.4 | 7.8 | 5.7 | 6.0 | 4.5 | |
| Divorced | 12.7 | 13.6 | 6.7 | 11.6 | 15.3 | | 12.7 | 16.1 | 15.4 | 9.0 | 13.6 | | 14.6 | 18.8 | 15.2 | 10.9 | 10.2 | |
| Chi-square test of independence | *** | *** | * | * | * | | * | * | * | *** | NS | | *** | *** | NS | *** | *** | *** |
| Beneficiaries Under Age 65 | | | | | | | | | | | | | | | | | | |
| Number of Cases | 368 | 197 | 14 | 103 | 54 | | 2,295 | 1,072 | 256 | 611 | 356 | | 1,737 | 770 | 216 | 458 | 293 | |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |
| Single | 40.2 | 32.0 | 42.9 | 48.5 | 53.7 | | 44.8 | 37.2 | 51.6 | 42.4 | 66.9 | | 48.4 | 39.5 | 53.2 | 43.9 | 75.1 | |
| Married | 23.1 | 31.5 | 28.6 | 12.6 | 11.1 | | 22.7 | 27.5 | 15.2 | 24.9 | 9.6 | | 20.4 | 22.7 | 15.7 | 28.8 | 4.4 | |
| Widowed | 8.7 | 6.6 | 7.1 | 14.6 | 5.6 | | 8.2 | 7.8 | 7.8 | 11.8 | 3.4 | | 8.1 | 8.4 | 11.1 | 7.6 | 5.5 | |
| Separated | 10.9 | 9.6 | 7.1 | 12.6 | 13.0 | | 6.8 | 7.4 | 7.0 | 6.2 | 5.9 | | 7.4 | 8.2 | 7.4 | 7.4 | 5.5 | |
| Divorced | 17.1 | 20.3 | 14.3 | 11.7 | 16.7 | | 17.6 | 20.1 | 18.4 | 14.7 | 14.3 | | 15.8 | 21.2 | 12.5 | 12.2 | 9.6 | |
| Chi-square test of independence | * | NS | NS | ** | *** | | NS | NS | NS | * | NS | | NS | NS | NS | NS | * | * |
| Beneficiaries Age 65 and Over | | | | | | | | | | | | | | | | | | |
| Number of Cases | 512 | 253 | 16 | 225 | 18 | | 3,067 | 1,027 | 236 | 1,703 | 101 | | 1,106 | 438 | 171 | 437 | 60 | |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |
| Single | 12.5 | 7.5 | 6.3 | 16.4 | 38.9 | | 10.1 | 9.2 | 11.9 | 9.9 | 17.8 | | 16.4 | 14.6 | 19.9 | 14.6 | 31.7 | |
| Married | 34.6 | 39.9 | 56.3 | 28.0 | 22.2 | | 31.5 | 35.0 | 25.0 | 30.8 | 24.8 | | 29.7 | 33.1 | 22.2 | 30.4 | 20.0 | |
| Widowed | 40.2 | 40.3 | 37.5 | 41.8 | 22.2 | | 46.6 | 40.8 | 46.2 | 50.3 | 44.6 | | 35.5 | 30.4 | 35.7 | 40.7 | 35.0 | |
| Separated | 3.1 | 4.0 | 0.0 | 2.2 | 5.6 | | 2.7 | 3.2 | 4.7 | 2.2 | 2.0 | | 5.2 | 7.1 | 3.5 | 4.6 | 0.0 | |
| Divorced | 9.6 | 8.3 | 0.0 | 11.6 | 11.1 | | 9.1 | 11.9 | 12.3 | 6.8 | 10.9 | | 13.3 | 14.8 | 18.7 | 9.6 | 13.3 | |
| Chi-square test of independence | ** | NS | * | NS | NS | | NS | NS | NS | *** | NS | | *** | *** | * | *** | *** | NS |

* p < .05

** p < .01

*** p < .001

MHS, Office of the Secretary

PERCENT OF BENEFICIARIES WITH PREVIOUS MENTAL
HEALTH TREATMENT BY FACILITY BY AGE--
BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION

| Previous Mental Health Treatment | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|----------------------------------|---------------|-------------|-------------|-------|-------|--------------------|-------------|-------------|-------|-------|----------------------------|-------------|-------------|-------|-------|
| | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP |
| All Beneficiaries | | | | | | | | | | | | | | | |
| Number of Cases | 1,151 | 645 | 31 | 330 | 93 | 6,311 | 2,470 | 622 | 2,695 | 524 | 2,911 | 1,241 | 395 | 906 | 369 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| No Previous Treatment | 19.1 | 20.0 | 12.9 | 24.2 | 7.5 | 34.0 | 30.1 | 18.5 | 44.8 | 14.9 | 15.8 | 19.0 | 13.2 | 16.9 | 4.9 |
| Some Previous Treatment | 80.9 | 80.0 | 87.1 | 75.8 | 80.1 | 66.0 | 69.9 | 81.5 | 55.2 | 85.1 | 84.2 | 81.0 | 86.8 | 83.1 | 95.1 |
| Chi-square test of independence | * | NS | NS | ** | NS | *** | *** | NS | *** | NS | *** | *** | * | *** | *** |
| Beneficiaries Under Age 65 | | | | | | | | | | | | | | | |
| Number of Cases | 446 | 239 | 14 | 104 | 89 | 2,713 | 1,282 | 335 | 707 | 389 | 1,781 | 793 | 222 | 462 | 304 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| No Previous Treatment | 14.6 | 17.2 | 7.1 | 17.3 | 5.6 | 16.2 | 16.7 | 8.1 | 23.8 | 8.0 | 11.1 | 15.1 | 10.8 | 9.7 | 2.6 |
| Some Previous Treatment | 85.5 | 82.8 | 92.9 | 82.7 | 94.4 | 83.8 | 83.3 | 91.9 | 76.2 | 92.0 | 88.9 | 84.9 | 89.2 | 90.3 | 97.4 |
| Chi-square test of independence | NS | NS | NS | * | NS | NS | NS | NS | NS | NS | *** | NS | NS | *** | ** |
| Beneficiaries Age 65 and Over | | | | | | | | | | | | | | | |
| Number of Cases | 705 | 406 | 17 | 226 | 56 | 3,598 | 1,188 | 287 | 1,988 | 135 | 1,130 | 448 | 173 | 444 | 65 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| No Previous Treatment | 22.0 | 21.7 | 17.6 | 27.4 | 3.6 | 47.4 | 44.5 | 30.7 | 52.3 | 34.8 | 23.2 | 25.9 | 16.2 | 24.3 | 15.4 |
| Some Previous Treatment | 78.0 | 78.3 | 82.4 | 72.6 | 96.4 | 52.6 | 55.5 | 69.3 | 47.7 | 55.2 | 76.8 | 74.1 | 83.8 | 75.7 | 84.6 |
| Chi-square test of independence | NS | NS | NS | NS | *** | *** | *** | NS | *** | *** | *** | *** | *** | *** | NS |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES WITH SPECIFIC TYPES OF PREVIOUS
MENTAL HEALTH TREATMENT BY FACILITY TYPE--
BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
ALL BENEFICIARIES

| Previous Mental Health Treatment | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|--------------------------------------|---------------|-------------|--------------|---------|---------|--------------------|-------------|-------------|---------|--------|----------------------------|-------------|--------------|---------|---------|
| | ALL | CMHC- OP | CMHC- PIL | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PIL | AMHC | PHP |
| NUMBER OF CASES | 644 | 311 | 21 | 205 | 107 | 4,987 | 1,990 | 457 | 2,099 | 441 | 2,581 | 1,157 | 284 | 800 | 340 |
| None | 34.0*** | 41.2*** | 19.1 | 39.0*** | 6.5 | 43.0*** | 37.3 | 25.2 | 57.6*** | 17.7** | 17.7*** | 20.3*** | 18.0*** | 19.1*** | 5.3*** |
| Nonpsychiatric Physician Practice | 1.6 | 1.3 | 4.8 | 1.0 | 2.8* | 1.2 | 1.4 | 0.7 | 1.4 | 0.2* | 0.9 | 1.2 | 0.7 | 0.9 | 0.0 |
| County Mental Hospital | 3.9** | 2.6*** | 0.0 | 1.5 | 13.1 | 2.7 | 1.7 | 2.0 | 1.5 | 14.3 | 6.8*** | 9.7*** | 6.0** | 2.6 | 7.6** |
| State Mental Hospital | 32.8** | 24.8*** | 33.3 | 39.0*** | 43.9 | 29.8 | 28.0 | 44.9 | 25.4*** | 43.8 | 51.9*** | 49.5*** | 53.5* | 56.0*** | 48.8 |
| V.A. Hospital | 1.9 | 1.9 | 0.0 | 1.5 | 2.8 | 2.4 | 3.2 | 2.2 | 1.3 | 3.9 | 2.6 | 2.2 | 1.8 | 2.3 | 5.3 |
| Private Mental Hospital | 2.6 | 2.3 | 4.8 | 1.0 | 6.5 | 2.5 | 1.8 | 3.9 | 1.3 | 9.8 | 3.7** | 1.7 | 1.8 | 4.0*** | 11.2 |
| Private Psychiatric Practice | 2.5** | 1.6* | 0.0 | 2.9 | 4.7 | 5.6** | 5.4** | 8.8 | 4.8 | 7.3 | 5.3 | 4.4 | 8.1 | 6.5 | 3.2* |
| Other Private Mental Health Practice | 1.9* | 1.6 | 9.5** | 1.0 | 2.8 | 0.8* | 0.9 | 1.1* | 0.4 | 1.8 | 0.7 | 0.6 | 0.4 | 1.0 | 0.6 |
| Other Mental Health Center | 16.0 | 16.4* | 9.5 | 17.8 | 31.8 | 16.3 | 17.3 | 30.6 | 9.0*** | 31.5 | 16.8 | 11.7*** | 15.9*** | 15.9*** | 37.1 |
| General Hospital Psychiatric Unit | 9.9*** | 10.6*** | 23.8*** | 2.9*** | 18.7 | 20.0*** | 27.8*** | 27.4 | 8.9** | 29.5* | 24.3*** | 29.3 | 26.4 | 16.0*** | 24.7 |
| Other Hospitals | 7.1* | 7.7*** | 14.3 | 2.0 | 15.9 | 1.4*** | 2.0*** | 2.8* | 0.3** | 1.8*** | 4.8*** | 2.8 | 6.7* | 1.6*** | 17.4*** |
| Other | 8.5*** | 4.8** | 19.1 | 8.8** | 16.8*** | 1.3*** | 1.6*** | 1.1*** | 1.1*** | 1.4*** | 3.3*** | 1.9 | 5.6*** | 3.5*** | 5.9*** |

* p < .05

** p < .01

*** p < .001

IHS, Office of the Secretary

PERCENT OF BENEFICIARIES WITH SPECIFIC TYPES OF PREVIOUS
MENTAL HEALTH TREATMENT BY FACILITY TYPE--
BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
BENEFICIARIES UNDER AGE 65

| Previous Mental Health Treatment | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|--------------------------------------|---------------|---------|--------|---------|---------|--------------------|---------|--------|---------|--------|----------------------------|---------|---------|---------|-------|
| | ALL | OP | PH | AMHC | PHP | ALL | OP | PH | AMHC | PHP | ALL | OP | PH | AMHC | PHP |
| NUMBER OF CASES | 311 | 152 | 14 | 68 | 77 | 2,183 | 1,014 | 244 | 576 | 349 | 1,662 | 745 | 188 | 440 | 289 |
| None | 20.9*** | 27.0** | 7.1 | 26.5*** | 6.5 | 17.6 | 21.1 | 11.1 | 29.2*** | 8.9 | 11.8*** | 16.1** | 12.2 | 10.2*** | 2.8** |
| Nonpsychiatric Physician Practice | 0.3 | 0.0 | 7.1 | 0.0 | 0.0 | 0.8 | 1.0 | 1.2 | 0.9 | 0.3 | 0.9 | 1.3 | 0.5 | 0.9 | 0.0 |
| County Mental Hospital | 6.1 | 4.0 | 0.0 | 1.5 | 15.6 | 4.0 | 2.0 | 2.1 | 3.7 | 15.2 | 7.2*** | 9.0*** | 6.9* | 3.9 | 8.0** |
| State Mental Hospital | 37.9*** | 32.2*** | 35.7 | 50.0 | 39.0 | 38.7 | 38.1 | 57.8 | 46.7 | 48.4 | 54.6*** | 52.9*** | 52.1 | 63.0*** | 47.8 |
| V.A. Hospital | 3.2 | 3.3 | 0.0 | 2.9 | 3.9 | 4.0 | 5.1 | 3.7 | 3.7 | 4.9 | 3.2 | 2.3** | 2.1 | 3.6 | 5.5 |
| Private Mental Hospital | 4.5 | 4.0 | 7.1 | 1.5 | 7.8 | 3.5 | 2.8 | 3.3 | 1.6 | 12.0 | 4.6 | 1.9 | 2.1 | 5.0** | 12.8 |
| Private Psychiatric Practice | 2.3** | 2.0 | 0.0 | 0.0* | 5.2 | 6.6** | 6.8* | 10.2 | 7.1* | 8.6 | 6.3 | 5.4 | 11.8 | 7.5 | 3.5* |
| Other Private Mental Health Practice | 3.2*** | 1.6 | 14.3** | 1.5 | 2.6 | 1.1** | 1.4*** | 0.4*** | 1.2 | 1.7 | 0.8 | 0.7 | 0.5 | 1.1 | 0.7 |
| Other Mental Health Center | 22.8 | 20.4 | 14.3 | 14.7 | 36.4 | 22.4 | 23.1 | 39.3 | 17.7 | 36.4 | 20.3 | 13.2*** | 17.0*** | 21.1 | 39.5 |
| General Hospital Psychiatric Unit | 18.6*** | 10.6*** | 23.8 | 4.4** | 22.1 | 26.0** | 34.7*** | 36.5 | 16.0* | 33.0 | 28.2 | 34.1 | 31.9 | 18.6 | 24.9* |
| Other Hospitals | 10.0* | 7.2 | 21.4 | 2.9 | 19.5*** | 1.9*** | 2.6** | 3.3** | 1.0 | 2.0*** | 6.5** | 3.5 | 8.5* | 1.8 | 2.0 |
| Other | 8.7*** | 4.6 | 21.4 | 7.4 | 15.6* | 1.5*** | 1.7 | 0.4*** | 2.4 | 1.7*** | 4.1*** | 2.3 | 7.5*** | 4.3 | 6.2** |

* p < .05

** p < .01

*** p < .001

IHS, Office of the Secretary

PERCENT OF BENEFICIARIES WITH SPECIFIC TYPES OF PREVIOUS
MENTAL HEALTH TREATMENT BY FACILITY TYPE--
BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
BENEFICIARIES AGE 65 AND OVER

| Previous Mental Health Treatment | BASELINE ONLY | | | | DEMONSTRATION ONLY | | | | BASELINE AND DEMONSTRATION | | | | | | |
|--------------------------------------|---------------|-------------|-------------|--------------|--------------------|-------------|-------------|--------------|----------------------------|-------------|-------------|--------------|---------|---------|---------|
| | ALL | CMHC- OP | CMHC- PH | AMHC- PHP | ALL | CMHC- OP | CMHC- PH | AMHC- PHP | ALL | CMHC- OP | CMHC- PH | AMHC- PHP | | | |
| NUMBER OF CASES | 333 | 159 | 7 | 137 | 30 | 2,804 | 976 | 213 | 1,523 | 92 | 919 | 412 | 96 | 360 | 51 |
| None | 46.2*** | 54.7*** | 42.9 | 45.3*** | 6.7 | 60.8** | 54.2 | 41.3 | 68.3*** | 51.1*** | 28.4*** | 27.9*** | 29.2 | 30.0*** | 19.6*** |
| Nonpsychiatric Physician Practice | 2.7* | 2.5 | 0.0 | 1.5 | 10.0 | 1.5 | 1.8 | 0.0 | 1.6 | 0.0* | 0.9* | 1.0 | 1.0 | 0.8 | 0.0 |
| County Mental Hospital | 1.8** | 1.3 | 0.0 | 1.5 | 6.7 | 1.3 | 1.3 | 1.9 | 0.6 | 10.9 | 6.1** | 10.9*** | 4.2 | 1.1 | 5.9 |
| State Mental Hospital | 27.9*** | 17.6*** | 28.6 | 33.6** | 56.7 | 18.7*** | 17.6 | 30.1 | 17.3*** | 26.1** | 47.0*** | 43.5*** | 56.3*** | 47.5*** | 54.9*** |
| V.A. Hospital | 0.6 | 0.6 | 0.0 | 0.7 | 0.0 | 0.7 | 1.1 | 0.5 | 0.5 | 0.0 | 1.4 | 1.9 | 1.0 | 0.6 | 3.9 |
| Private Mental Hospital | 0.6 | 0.6 | 0.0 | 0.7 | 3.3 | 1.4 | 0.8 | 4.7 | 1.3 | 1.1 | 2.0 | 1.5 | 1.0 | 2.8 | 2.0 |
| Private Psychiatric Practice | 3.0 | 1.3 | 0.0 | 4.4 | 2.2 | 4.1 | 4.0 | 7.0 | 3.9 | 2.2 | 3.6 | 2.7 | 2.1 | 5.3 | 2.0 |
| Other Private Mental Health Practice | 0.6 | 0.0 | 0.0 | 0.7 | 3.3 | 0.4 | 0.3 | 1.9 | 0.1 | 2.2 | 0.5 | 0.5 | 0.0 | 0.8 | 0.0 |
| Other Mental Health Center | 9.6 | 12.6 | 0.0 | 4.4 | 2.0* | 9.0 | 11.3 | 20.7 | 5.7 | 13.0 | 10.4 | 9.0 | 13.5 | 9.4* | 23.5* |
| General Hospital Psychiatric Unit | 5.7*** | 7.6*** | 14.3 | 2.2*** | 10.0 | 12.4*** | 20.6*** | 16.9 | 6.2 | 16.3 | 17.2*** | 20.6*** | 15.6 | 12.8** | 23.5 |
| Other Hospitals | 4.5** | 6.9** | 0.0 | 1.5 | 6.7 | 0.7 | 1.4*** | 2.4 | 0.1* | 1.1 | 1.6** | 1.5** | 3.1 | 1.4** | 2.0 |
| Other | 8.4*** | 5.0* | 14.3* | 9.5** | 20.0 | 1.0*** | 1.5** | 1.9*** | 0.6*** | 0.0*** | 2.0*** | 1.2* | 2.1* | 2.5** | 3.9 |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

DISTRIBUTION OF BENEFICIARY LIVING ARRANGEMENTS
BY FACILITY TYPE BY BENEFICIARY AGE--
BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
ALL BENEFICIARIES

| | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|--------------------------------|---------------|-------|--------|-------|-------|--------------------|-------|--------|-------|-------|----------------------------|-------|--------|-------|-------|
| | CMHC-- | | CMHC-- | | PHP | CMHC-- | | CMHC-- | | PHP | CMHC-- | | CMHC-- | | PHP |
| | ALL | OP | PH | AMHC | | ALL | OP | PH | AMHC | | ALL | OP | PH | AMHC | |
| Living Arrangement | | | | | | | | | | | | | | | |
| NUMBER OF CASES | 675 | 258 | 22 | 325 | 70 | 5,145 | 1,934 | 464 | 2,295 | 451 | 2,556 | 1,000 | 335 | 867 | 354 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Own Home/Apartment | 43.6 | 69.8 | 59.0 | 25.2 | 27.1 | 48.9 | 53.2 | 43.1 | 50.7 | 27.5 | 43.3 | 50.0 | 50.4 | 41.3 | 23.2 |
| With Relatives | 12.1 | 9.7 | 0.0 | 12.6 | 22.9 | 16.8 | 20.3 | 4.0 | 11.9 | 27.5 | 22.5 | 24.2 | 17.0 | 20.8 | 27.1 |
| With Friends | 1.3 | 0.4 | 0.0 | 2.5 | 0.0 | 1.7 | 2.0 | 2.8 | 1.3 | 2.0 | 1.4 | 1.2 | 0.3 | 2.2 | 0.6 |
| Congregate Living Arrangement | 8.3 | 4.7 | 13.6 | 4.3 | 38.6 | 12.5 | 10.0 | 17.9 | 8.6 | 37.7 | 18.2 | 17.9 | 14.6 | 9.6 | 43.2 |
| Intermediate Care Facility | 13.6 | 6.9 | 18.2 | 21.3 | 1.4 | 4.9 | 1.0 | 10.6 | 7.8 | 1.3 | 4.8 | 2.0 | 8.4 | 8.0 | 1.4 |
| Skilled Nursing Facility | 14.5 | 5.0 | 9.1 | 25.2 | 1.4 | 10.7 | 8.2 | 5.4 | 15.3 | 3.3 | 5.9 | 2.0 | 5.7 | 12.2 | 2.0 |
| Other Unspecified LTC Facility | 0.4 | 0.0 | 0.0 | 0.9 | 0.0 | 1.0 | 2.0 | 1.7 | 0.3 | 0.0 | 0.4 | 0.2 | 0.0 | 1.0 | 0.0 |
| Hospital | 1.8 | 0.8 | 0.0 | 3.1 | 0.0 | 0.4 | 0.3 | 0.0 | 0.5 | 0.4 | 0.7 | 0.1 | 0.0 | 1.6 | 0.6 |
| Correctional Institution | 0.6 | 0.4 | 0.0 | 0.9 | 0.0 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.5 | 0.0 |
| Other | 3.7 | 2.3 | 0.0 | 4.0 | 8.6 | 2.9 | 2.8 | 1.5 | 3.6 | 0.2 | 2.5 | 2.2 | 3.3 | 2.9 | 2.0 |
| | *** | *** | NS | *** | ** | *** | *** | NS | *** | *** | *** | *** | *** | *** | NS |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

DISTRIBUTION OF BENEFICIARY LIVING ARRANGEMENTS
BY FACILITY TYPE BY BENEFICIARY AGE--
BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
BENEFICIARIES UNDER AGE 65

| Living Arrangement | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|--------------------------------|---------------|-------------|-------------|-------|-------|--------------------|-------------|-------------|-------|-------|----------------------------|-------------|-------------|-------|-------|
| | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP |
| NUMBER OF CASES | 276 | 112 | 11 | 101 | 52 | 2,157 | 965 | 244 | 595 | 353 | 1,555 | 629 | 194 | 441 | 291 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Own Home/Apartment | 42.8 | 63.4 | 63.6 | 25.7 | 26.9 | 42.2 | 51.3 | 32.8 | 41.5 | 25.2 | 41.2 | 47.4 | 45.9 | 43.3 | 21.3 |
| With Relatives | 17.4 | 14.3 | 0.0 | 17.8 | 26.9 | 25.0 | 27.5 | 21.3 | 18.0 | 32.6 | 30.2 | 31.2 | 27.8 | 28.6 | 32.0 |
| With Friends | 1.1 | 0.9 | 0.0 | 2.0 | 0.0 | 2.8 | 2.6 | 4.5 | 2.7 | 2.5 | 1.7 | 1.4 | 1.0 | 2.9 | 0.7 |
| Congregate Living Arrangement | 11.2 | 5.4 | 18.2 | 4.0 | 36.5 | 16.6 | 11.7 | 24.2 | 9.7 | 36.0 | 18.8 | 15.7 | 16.0 | 9.8 | 41.2 |
| Intermediate Care Facility | 12.0 | 8.0 | 0.0 | 22.8 | 1.9 | 4.4 | 0.5 | 12.3 | 9.4 | 1.1 | 2.8 | 1.3 | 5.7 | 4.5 | 1.4 |
| Skilled Nursing Facility | 11.2 | 4.5 | 18.2 | 22.8 | 1.9 | 4.9 | 1.8 | 2.0 | 12.9 | 1.7 | 2.3 | 0.3 | 1.0 | 6.8 | 0.3 |
| Other Unspecified LTC Facility | -- | -- | -- | -- | -- | 0.6 | 0.6 | 0.8 | 0.8 | 0.0 | 0.2 | 0.0 | 0.0 | 0.7 | 0.0 |
| Hospital | 1.1 | 0.0 | 0.0 | 3.0 | 0.0 | 0.3 | 0.4 | 0.0 | 0.2 | 0.6 | 0.5 | 0.2 | 0.0 | 1.1 | 0.7 |
| Correctional Institution | 0.7 | 0.9 | 0.0 | 1.0 | 0.0 | 0.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.0 | 0.5 | 0.0 |
| Other | 2.5 | 2.7 | 0.0 | 1.0 | 0.0 | 3.0 | 3.2 | 2.0 | 4.7 | 0.3 | 2.2 | 2.2 | 2.6 | 1.8 | 2.4 |
| | *** | *** | *** | *** | NS | *** | *** | * | *** | NS | *** | ** | * | *** | * |

* p < .05
** p < .01
*** p < .001

HHS, Office of the Secretary

DISTRIBUTION OF BENEFICIARY LIVING ARRANGEMENTS
BY FACILITY TYPE BY BENEFICIARY AGE--
BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
BENEFICIARIES AGE 65 AND OVER

| Living Arrangement | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|--------------------------------|---------------|-------------|-------------|-------|-------|--------------------|-------------|-------------|-------|-------|----------------------------|-------------|-------------|-------|-------|
| | ALL | CMHC- OP | CMHC- PH | AMHC | PIIP | ALL | CMHC- OP | CMHC- PH | AMHC | PIIP | ALL | CMHC- OP | CMHC- PH | AMHC | PIIP |
| NUMBER OF CASES | 399 | 146 | 11 | 224 | 18 | 2,988 | 969 | 220 | 1,701 | 98 | 1,001 | 371 | 141 | 426 | 63 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Own Home/Apartment | 44.1 | 74.7 | 54.5 | 25.0 | 27.8 | 53.7 | 55.1 | 54.5 | 53.9 | 35.7 | 46.9 | 54.4 | 56.7 | 39.2 | 31.7 |
| With Relatives | 8.5 | 6.2 | 0.0 | 10.3 | 11.1 | 10.9 | 13.1 | 11.8 | 9.7 | 9.2 | 10.6 | 12.4 | 2.1 | 12.7 | 4.8 |
| With Friends | 1.5 | 0.0 | 0.0 | 2.7 | 0.0 | 1.0 | 1.3 | 0.9 | 0.8 | 0.0 | 0.9 | 0.8 | 0.0 | 1.4 | 0.0 |
| Congregate Living Arrangement | 6.3 | 4.1 | 9.1 | 4.5 | 44.4 | 9.6 | 8.3 | 10.9 | 8.2 | 43.9 | 17.1 | 21.6 | 12.8 | 9.4 | 52.4 |
| Intermediate Care Facility | 14.8 | 6.2 | 36.4 | 20.5 | 0.0 | 5.4 | 1.5 | 8.6 | 7.3 | 2.0 | 7.9 | 3.2 | 12.1 | 11.5 | 1.6 |
| Skilled Nursing Facility | 16.8 | 5.5 | 0.0 | 26.3 | 0.0 | 14.9 | 14.7 | 9.1 | 16.1 | 9.2 | 11.7 | 4.9 | 12.1 | 17.8 | 9.5 |
| Other Unspecified LTC Facility | 0.8 | 0.0 | 0.0 | 1.3 | 0.0 | 1.4 | 3.4 | 2.7 | 0.1 | 0.0 | 0.8 | 0.5 | 0.0 | 1.4 | 0.0 |
| Hospital | 2.3 | 1.4 | 0.0 | 3.1 | 0.0 | 0.4 | 0.1 | 0.0 | 0.6 | 0.0 | 0.9 | 0.0 | 0.0 | 2.1 | 0.0 |
| Correctional Institution | 0.5 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.5 | 0.0 |
| Other | 4.5 | 2.1 | 0.0 | 5.4 | 16.7 | 2.7 | 2.5 | 0.9 | 0.3 | 0.0 | 3.1 | 2.2 | 4.3 | 4.0 | 0.0 |
| | *** | *** | NS | *** | * | *** | *** | NS | *** | ** | *** | *** | * | *** | NS |

* p < .05

** p < .01

*** p < .001

EXHIBIT 66

IHHS, Office of the Secretary

PERCENT OF BENEFICIARIES REFERRED FROM VARIOUS SOURCES BY FACILITY TYPE--
 BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
 ALL BENEFICIARIES

| Referral Source | BASELINE ONLY | | | | DEMONSTRATION ONLY | | | | BASELINE AND DEMONSTRATION | | | | | | |
|----------------------------------|---------------|-------------|-------------|-------------|--------------------|-------------|-------------|-------------|----------------------------|-------------|-------------|-------------|--------|--------|--------|
| | ALL | CMHC- OP | CMHC- PH | AMHC PHP | ALL | CMHC- OP | CMHC- PH | AMHC PHP | ALL | CMHC- OP | CMHC- PH | AMHC PHP | | | |
| NUMBER OF CASES | 1,040 | 556 | 27 | 318 | 139 | 5,343 | 2,100 | 473 | 2,321 | 449 | 2,771 | 1,188 | 368 | 868 | 347 |
| Family, Friends | 12.6 | 13.1 | 18.5** | 12.6 | 9.4 | 18.8** | 17.5* | 13.5 | 23.7** | 5.4 | 12.7** | 13.8** | 13.3 | 13.6** | 6.3 |
| Self | 16.6** | 19.4 | 22.2 | 13.2 | 12.2 | 22.8** | 26.4** | 13.1** | 23.7** | 11.6 | 22.7 | 32.1** | 19.0* | 15.7** | 11.8 |
| Social Service Agency | 9.9 | 6.3 | 22.2 | 9.4 | 23.0* | 11.3 | 9.8* | 12.3 | 12.5 | 11.4** | 11.5 | 10.9 | 12.8 | 11.9 | 11.5 |
| Court Lawyer | 3.4 | 4.7 | 0.0 | 2.8 | 0.0 | 5.1* | 10.0** | 3.0 | 2.2 | 0.0 | 3.8** | 5.4** | 4.9 | 2.2 | 1.2 |
| Clergy | 0.5 | 0.7 | 0.0 | 0.3 | 0.0 | 0.8 | 0.8 | 0.6 | 1.2 | 0.2 | 0.3* | 0.3 | 0.0 | 0.5 | 0.3 |
| Nonpsychiatric Physician | 5.7* | 5.8 | 14.8 | 5.7 | 3.6 | 6.9* | 9.0* | 8.0 | 4.4 | 8.5 | 7.8 | 7.2** | 14.1** | 7.7** | 2.9** |
| Private Psychiatrist | 1.0* | 1.1 | 0.0 | 0.0 | 2.9 | 2.2* | 2.5 | 6.1 | 1.0 | 2.9 | 2.0 | 2.4 | 3.0 | 1.0 | 2.0 |
| Other Mental Health Practitioner | 13.0** | 24.3** | 0.0 | 0.0 | 0.0 | 0.9** | 1.6** | 1.1 | 0.3 | 0.5 | 0.7 | 0.8 | 1.1 | 0.4 | 1.2 |
| County Mental Hospital | 6.7** | 1.0** | 0.0 | 0.3 | 5.0* | 7.9 | 0.7 | 1.5 | 0.5 | 0.2** | 2.1** | 4.0** | 1.1 | 0.1 | 1.4 |
| State Mental Hospital | 10.3** | 2.7** | 7.4 | 17.3* | 27.3** | 7.0** | 6.8** | 6.6 | 6.9** | 8.9** | 17.6** | 15.5** | 10.1 | 24.4** | 15.9** |
| V.A. Hospital | 0.3 | 0.4 | 0.0 | 0.0 | 0.7 | 0.9 | 1.1 | 1.5 | 0.3 | 2.5 | 0.5 | 0.4* | 0.0* | 0.4 | 1.7 |
| Private Mental Hospital | 0.9 | 1.6 | 0.0 | 0.0 | 0.0 | 0.8 | 1.1 | 3.4 | 0.2 | 0.2 | 0.6 | 0.2** | 1.1 | 1.0** | 0.3 |
| Other Mental Health Center | 4.8** | 3.6* | 0.0 | 4.1 | 12.2* | 8.2** | 6.5* | 20.3* | 3.2 | 29.8 | 8.2 | 6.5 | 6.5** | 5.5** | 22.2* |
| Skilled Nursing Facility | 6.2** | 1.3 | 3.7 | 17.6** | 0.0 | 8.8** | 6.9** | 3.4 | 12.9** | 1.8 | 3.9** | 1.4** | 4.6 | 8.2** | 1.4 |
| Intermediate Care Facility | 5.1** | 1.4 | 0.0 | 13.5** | 1.4 | 4.2 | 1.2 | 7.8 | 6.9** | 0.7 | 3.0** | 1.6 | 6.0 | 4.7* | 0.0 |
| Other Long-Term Facility | 0.3 | 0.0 | 0.0 | 0.6 | 0.7 | 0.6 | 0.8 | 1.7 | 0.3 | 0.0 | 0.1** | 0.1** | 0.0 | 0.4 | 0.0 |
| Hospital | 4.0** | 5.0* | 3.7 | 1.9 | 5.0** | 6.4** | 8.5** | 8.3 | 4.0 | 6.9 | 7.8* | 8.6 | 9.2 | 2.7 | 16.1** |
| Other | 9.9 | 13.1** | 14.8 | 5.0 | 7.2 | 6.7** | 5.5** | 3.2* | 7.2 | 14.5 | 9.2** | 8.8** | 12.0** | 7.6 | 12.1 |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES REFERRED FROM VARIOUS SOURCES BY FACILITY TYPE--
 BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
 BENEFICIARIES UNDER AGE 65

| Referral Source | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|----------------------------------|---------------|-------------|-------------|--------|--------|--------------------|-------------|-------------|--------|--------|----------------------------|-------------|-------------|--------|--------|
| | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP |
| NUMBER OF CASES | 413 | 213 | 12 | 104 | 84 | 2,279 | 1,075 | 248 | 604 | 352 | 1,707 | 755 | 209 | 449 | 294 |
| Family, Friends | 9.2 | 9.9 | 8.3 | 6.7 | 10.7 | 13.3* | 14.1 | 11.7 | 17.9** | 4.0* | 12.2 | 12.6 | 15.3 | 14.0 | 6.5 |
| Self | 23.0 | 27.2 | 33.3** | 18.3 | 16.7 | 25.1 | 33.6 | 16.5** | 20.0 | 13.6 | 23.8 | 33.6 | 21.5 | 15.6 | 12.6 |
| Social Service Agency | 8.2 | 6.6 | 0.0 | 7.7 | 14.3 | 9.8 | 9.4 | 8.5 | 9.9 | 11.9 | 10.5 | 9.9 | 11.0 | 10.2 | 12.2 |
| Court Lawyer | 5.1 | 7.0 | 0.0 | 5.8 | 0.0 | 7.2 | 12.8* | 4.0 | 2.8 | 0.0 | 5.0** | 7.3** | 7.2 | 3.1 | 0.7 |
| Clergy | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.8 | 0.0 | 1.5 | 0.3 | 0.1** | 0.1 | 0.0* | 0.0 | 0.3 |
| Nonpsychiatric Physician | 4.1 | 4.7 | 25.0 | 2.9 | 1.2 | 4.6 | 5.2 | 3.2 | 4.1 | 5.1 | 6.0 | 5.4 | 6.2** | 8.9 | 2.7 |
| Private Psychiatrist | 1.5 | 1.4 | 0.0 | 0.0 | 3.6 | 3.3 | 3.6 | 5.7 | 2.0 | 2.3** | 2.3 | 2.9 | 4.8 | 1.1 | 1.0 |
| Other Mental Health Practitioner | 3.9** | 7.5** | 0.0 | 0.0 | 0.0 | 1.1** | 1.8** | 0.4* | 0.5 | 0.3 | 0.8 | 0.9 | 1.0 | 0.0 | 1.4 |
| County Mental Hospital | 2.4 | 1.9 | 0.0 | 1.0 | 6.0 | 1.3 | 0.7 | 1.6 | 1.5 | 2.6 | 1.8 | 2.9** | 1.9 | 0.0* | 1.7 |
| State Mental Hospital | 12.1** | 3.8 | 8.3 | 16.4* | 28.6** | 10.0 | 8.5* | 8.1 | 13.7 | 9.9** | 18.6** | 16.2** | 12.0 | 28.3** | 15.0 |
| V.A. Hospital | 0.7** | 0.9 | 0.0 | 0.0 | 1.2 | 1.6 | 1.7 | 1.6 | 0.6 | 3.1 | 5.3** | 0.4* | 0.0 | 0.2 | 1.7 |
| Private Mental Hospital | 1.2** | 2.4** | 0.0 | 0.0 | 0.0 | 1.2 | 1.7 | 2.8 | 0.3 | 0.3 | 6.4** | 0.3* | 1.4 | 1.1 | 0.3 |
| Other Mental Health Center | 6.8 | 4.2 | 0.0 | 6.7 | 14.3 | 13.8** | 8.2 | 26.6 | 7.1 | 33.2** | 9.9** | 7.4 | 8.6** | 6.0 | 23.1** |
| Skilled Nursing Facility | 4.1** | 1.4 | 8.3 | 12.5** | 0.0 | 3.9 | 1.7 | 1.6 | 10.9 | 0.6 | 1.5** | 0.3* | 1.0 | 4.7** | 0.0 |
| Intermediate Care Facility | 5.1** | 1.4 | 0.0 | 15.4** | 2.4 | 3.6 | 0.8 | 11.3 | 7.1** | 0.3 | 1.2** | 1.2 | 2.4** | 1.3** | 0.0 |
| Other Long-Term Facility | 0.2 | 0.0 | 0.0 | 1.0 | 0.0 | 0.4 | 0.6 | 0.8 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.5 | 0.0 |
| Hospital | 6.3 | 7.5 | 8.3 | 2.9 | 7.1* | 7.4 | 9.0 | 9.7 | 3.0 | 8.5 | 9.4* | 9.8 | 12.4 | 2.2 | 17.0** |
| Other | 15.3* | 19.7** | 25.0 | 9.6 | 9.5 | 6.2** | 4.8** | 3.2** | 6.8 | 11.4 | 9.7** | 7.8* | 10.1** | 10.9* | 12.2 |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES REFERRED FROM VARIOUS SOURCES
BY FACILITY TYPE--BASELINE ONLY, DEMONSTRATION ONLY,
BASELINE AND DEMONSTRATION, BENEFICIARIES 65 AND OVER

| Referral Source | BASELINE ONLY | | | | DEMONSTRATION ONLY | | | | BASELINE AND DEMONSTRATION | | | | | | |
|----------------------------------|---------------|-------------|-------------|-------------|--------------------|-------------|-------------|-------------|----------------------------|-------------|-------------|-------------|---------|---------|---------|
| | ALL | CMHC- OP | CMHC- PH | AMHC PHP | ALL | CMHC- OP | CMHC- PH | AMHC PHP | ALL | CMHC- OP | CMHC- PH | AMHC PHP | | | |
| NUMBER OF CASES | 627 | 343 | 15 | 214 | 55 | 3,064 | 1,025 | 225 | 1,717 | 97 | 1,064 | 433 | 159 | 419 | 53 |
| Family, Friends | 14.8 | 15.2 | 26.7 | 15.4 | 7.3 | 23.0*** | 21.1* | 15.6 | 25.8** | 10.3 | 13.5*** | 15.9* | 10.7 | 13.1*** | 5.7 |
| Self | 12.4*** | 14.6*** | 13.3 | 10.8 | 5.5 | 21.1*** | 18.9 | 9.3 | 25.0*** | 4.1 | 20.8 | 29.3*** | 15.7 | 15.8*** | 7.6 |
| Social Service Agency | 11.0 | 6.1*** | 40.0* | 10.3 | 36.4*** | 12.4 | 10.2* | 16.4 | 13.5 | 9.3*** | 13.1 | 12.5 | 15.1 | 13.6 | 7.6 |
| Court Lawyer | 2.2 | 3.2** | 0.0 | 1.4 | 0.0 | 3.5 | 6.9* | 1.8 | 1.9 | 0.0 | 1.8** | 2.1*** | 1.9 | 1.2 | 3.8 |
| Clergy | 0.8 | 1.2 | 0.0 | 0.5 | 0.0 | 0.8 | 0.7 | 1.3 | 0.9 | 0.0 | 0.6 | 0.5 | 0.0 | 1.0 | 0.0 |
| Nonpsychiatric Physician | 6.7** | 6.4 | 6.7 | 7.0 | 7.3 | 8.5 | 12.9** | 13.3*** | 4.5 | 20.6 | 10.6* | 10.4 | 24.5** | 6.4 | 3.8* |
| Private Psychiatrist | 0.6 | 0.9 | 0.0 | 0.0 | 1.8 | 1.4 | 1.3 | 6.7 | 0.6*** | 3.1 | 1.5 | 1.6 | 0.6** | 1.0 | 7.6 |
| Other Mental Health Practitioner | 19.0 | 34.7*** | 0.0 | 0.0 | 0.0 | 0.8*** | 1.5*** | 1.8 | 0.3 | 1.0 | 0.7 | 0.5 | 1.3 | 0.7 | 0.0 |
| County Mental Hospital | 0.5** | 0.3*** | 0.0 | 0.0 | 3.6 | 0.4 | 0.8 | 1.3 | 0.1 | 0.0 | 2.5*** | 6.0*** | 0.0*** | 0.2 | 0.0 |
| State Mental Hospital | 9.1*** | 1.2*** | 6.7 | 17.8 | 25.5 | 4.7*** | 5.0*** | 4.9 | 4.5*** | 5.2*** | 16.0*** | 14.3*** | 7.6 | 20.3*** | 20.8*** |
| V.A. Hospital | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.5 | 1.3 | 0.2 | 0.0 | 0.5 | 0.5 | 0.0 | 0.5 | 1.9 |
| Private Mental Hospital | 0.6 | 1.2 | 0.0 | 0.0 | 0.0 | 0.5 | 0.4 | 4.0 | 0.1 | 0.0 | 0.5* | 0.0*** | 0.6 | 1.0** | 0.0 |
| Other Mental Health Center | 3.5 | 3.2 | 0.0 | 2.8 | 9.1 | 4.1 | 4.8 | 13.3 | 1.8 | 17.5 | 5.4 | 4.9 | 3.8** | 5.0*** | 17.0 |
| Skilled Nursing Facility | 7.5 | 1.2 | 0.0 | 20.1** | 0.0 | 12.3*** | 12.3*** | 5.3 | 13.6* | 6.2 | 7.9*** | 3.2*** | 9.4 | 11.9 | 9.4 |
| Intermediate Care Facility | 5.1 | 1.5 | 0.0 | 12.6 | 0.0 | 4.7 | 1.6 | 4.0 | 6.8 | 2.1 | 5.8 | 2.3 | 10.7* | 8.4 | 0.0 |
| Other Long-Term Facility | 0.3 | 0.0 | 0.0 | 0.5 | 1.8 | 0.7 | 1.1 | 2.7 | 0.3 | 0.0 | 0.2 | 0.2 | 0.0 | 0.2 | 0.0 |
| Hospital | 2.6* | 3.5 | 0.0 | 1.4 | 1.8 | 5.6** | 8.0** | 6.7 | 4.4 | 1.0 | 5.2 | 6.5 | 5.0 | 3.1 | 11.3* |
| Other | 6.4 | 9.0 | 6.7 | 2.8 | 3.6 | 7.2 | 6.2 | 3.1 | 7.3* | 25.8** | 8.5 | 10.4** | 14.5*** | 4.1* | 11.3 |

* p < .05

** p < .01

*** p < .001

EXHIBIT 69(1)

HHS, Office of the Secretary

BENEFICIARY DIAGNOSIS BY FACILITY BY AGE--

BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION

| Diagnosis | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|---|---------------|-------------|-------------|-------|-------|--------------------|-------------|-------------|-------|-------|----------------------------|-------------|-------------|-------|-------|
| | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP |
| All Beneficiaries | | | | | | | | | | | | | | | |
| Number of Cases | 931 | 464 | 31 | 307 | 129 | 6,116 | 2,390 | 598 | 2,642 | 486 | 2,827 | 1,203 | 374 | 902 | 348 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Organic Mental Disorders | 15.7 | 11.4 | 0.0 | 25.4 | 11.6 | 18.1 | 16.9 | 17.6 | 20.0 | 14.2 | 8.5 | 6.3 | 7.2 | 12.4 | 7.6 |
| Substance Use Disorders | 5.4 | 9.9 | 3.2 | 1.0 | 0.0 | 4.6 | 6.1 | 2.3 | 4.5 | 1.0 | 2.4 | 2.9 | 1.9 | 2.7 | 0.6 |
| Schizophrenic Disorders | 21.8 | 18.5 | 25.8 | 16.6 | 45.0 | 21.9 | 23.4 | 36.9 | 12.6 | 47.5 | 45.3 | 48.9 | 46.5 | 32.7 | 64.1 |
| Paranoid and Other Psychotic Disorders | 2.8 | 3.0 | 0.0 | 3.6 | 0.8 | 1.9 | 1.8 | 1.8 | 2.2 | 1.4 | 2.3 | 3.0 | 2.1 | 1.0 | 1.7 |
| Affective Disorders | 12.7 | 14.7 | 19.4 | 9.4 | 11.6 | 14.6 | 15.2 | 23.2 | 12.1 | 14.4 | 14.3 | 12.0 | 18.4 | 17.4 | 9.2 |
| Anxiety, Somatoform, and Dissociative Disorders | 14.2 | 18.8 | 6.5 | 11.7 | 5.4 | 13.5 | 17.2 | 8.5 | 12.2 | 8.6 | 13.7 | 15.5 | 10.2 | 15.4 | 6.0 |
| Adjustment Disorder | 9.2 | 5.4 | 6.5 | 11.7 | 17.8 | 15.8 | 8.1 | 5.0 | 26.8 | 7.4 | 5.0 | 2.9 | 8.3 | 6.9 | 3.7 |
| Disorders Usually First Evident in Infancy, Childhood, or Adolescence | 10.7 | 9.7 | 9.7 | 15.0 | 4.7 | 5.7 | 7.1 | 1.7 | 5.6 | 4.3 | 6.8 | 7.2 | 2.9 | 8.2 | 5.7 |
| Other Disorders | 3.7 | 4.5 | 3.2 | 2.7 | 3.1 | 0.9 | 1.0 | 0.2 | 1.1 | 0.0 | 1.2 | 0.9 | 0.8 | 1.7 | 1.4 |
| Conditions Not Attributable to a Mental Disorder or Diagnosis | 3.9 | 4.0 | 25.8 | 2.9 | 0.0 | 2.8 | 3.1 | 2.7 | 2.9 | 1.0 | 0.7 | 0.4 | 1.6 | 1.1 | 0.0 |
| Deferred | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | NS | *** | *** | *** | *** |
| Beneficiaries Under Age 65 | | | | | | | | | | | | | | | |
| Number of Cases | 395 | 208 | 14 | 98 | 75 | 2,634 | 1,249 | 329 | 694 | 362 | 1,728 | 772 | 210 | 460 | 286 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Organic Mental Disorders | 8.4 | 4.3 | 0.0 | 15.3 | 12.0 | 7.0 | 5.0 | 7.0 | 9.4 | 9.7 | 4.3 | 3.4 | 4.3 | 5.4 | 4.9 |
| Substance Use Disorders | 5.3 | 10.1 | 0.0 | 0.0 | 0.0 | 6.2 | 7.1 | 2.4 | 9.1 | 1.1 | 2.7 | 3.1 | 1.4 | 4.1 | 0.3 |
| Schizophrenic Disorders | 35.4 | 27.4 | 50.0 | 26.5 | 66.7 | 39.5 | 36.7 | 54.7 | 27.8 | 57.5 | 57.5 | 57.9 | 59.0 | 47.2 | 71.7 |
| Paranoid and Other Psychotic Disorders | 1.0 | 1.4 | 0.0 | 1.0 | 0.0 | 1.4 | 1.3 | 1.8 | 1.6 | 1.4 | 1.7 | 2.6 | 1.9 | 1.1 | 0.3 |
| Affective Disorders | 12.7 | 16.3 | 21.4 | 8.2 | 6.7 | 16.2 | 16.7 | 21.9 | 14.4 | 13.0 | 12.6 | 10.6 | 20.0 | 14.8 | 8.7 |
| Anxiety, Somatoform, and Dissociative Disorders | 12.9 | 16.8 | 7.1 | 12.2 | 4.0 | 12.5 | 16.7 | 6.1 | 11.0 | 6.9 | 11.1 | 13.7 | 4.8 | 12.8 | 5.6 |
| Adjustment Disorder | 4.1 | 2.9 | 0.0 | 8.2 | 2.7 | 6.3 | 4.8 | 2.1 | 12.2 | 4.1 | 2.2 | 1.7 | 2.9 | 3.5 | 1.0 |
| Disorders Usually First Evident in Infancy, Childhood, or Adolescence | 13.4 | 12.5 | 14.3 | 22.4 | 4.0 | 7.7 | 8.1 | 2.1 | 10.8 | 5.8 | 6.4 | 5.6 | 3.3 | 9.1 | 6.3 |
| Other Disorders | 1.8 | 5.3 | 7.1 | 3.1 | 4.0 | 0.8 | 1.0 | 0.3 | 1.2 | 0.0 | 1.0 | 1.0 | 1.4 | 0.9 | 1.0 |
| Conditions Not Attributable to a Mental Disorder or Diagnosis | 2.3 | 2.9 | 0.0 | 3.1 | 0.0 | 2.2 | 2.6 | 1.5 | 2.6 | 0.6 | 0.6 | 0.4 | 1.0 | 1.1 | 0.0 |
| Deferred | *** | *** | NS | *** | NS | *** | *** | * | *** | * | *** | *** | NS | *** | *** |

| Diagnosis | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|---|---------------|-------------|-------------|-------|-------|--------------------|-------------|-------------|-------|-------|----------------------------|-------------|-------------|-------|-------|
| | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP |
| Beneficiaries Age 65 and Over | | | | | | | | | | | | | | | |
| Number of Cases | 536 | 256 | 17 | 209 | 54 | 3,482 | 1,141 | 269 | 1,948 | 124 | 1,099 | 431 | 164 | 442 | 62 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Organic Mental Disorders | 21.1 | 17.2 | 0.0 | 30.1 | 11.1 | 26.5 | 30.1 | 30.5 | 23.8 | 27.4 | 15.2 | 11.6 | 11.0 | 19.7 | 19.4 |
| Substance Use Disorders | 5.4 | 9.8 | 5.9 | 1.4 | 0.0 | 3.4 | 5.0 | 2.2 | 2.8 | 0.8 | 2.0 | 2.8 | 2.4 | 1.1 | 1.6 |
| Schizophrenic Disorders | 11.8 | 11.3 | 5.9 | 12.0 | 14.8 | 8.7 | 8.8 | 15.2 | 7.1 | 18.5 | 26.1 | 32.7 | 30.5 | 17.6 | 29.0 |
| Paranoid and Other Psychotic Disorders | 4.1 | 4.3 | 0.0 | 4.8 | 1.9 | 2.4 | 2.5 | 1.9 | 2.4 | 1.6 | 3.1 | 3.7 | 2.4 | 2.0 | 8.1 |
| Affective Disorders | 12.7 | 13.3 | 17.6 | 10.0 | 18.5 | 13.3 | 13.5 | 24.9 | 11.2 | 18.5 | 16.9 | 14.6 | 16.5 | 20.1 | 11.3 |
| Anxiety, Somatoform, and Dissociative Disorders | 15.1 | 20.3 | 5.9 | 11.5 | 7.4 | 14.3 | 17.8 | 11.5 | 12.6 | 13.7 | 17.7 | 18.8 | 17.1 | 18.1 | 8.1 |
| Adjustment Disorder | 13.1 | 7.4 | 11.8 | 13.4 | 38.9 | 23.0 | 11.7 | 8.6 | 32.0 | 16.9 | 9.4 | 5.1 | 15.2 | 10.4 | 16.1 |
| Disorders Usually First Evident in Infancy, Childhood, or Adolescence | 8.8 | 7.4 | 5.9 | 11.5 | 5.6 | 4.1 | 6.0 | 1.1 | 3.7 | 0.0 | 7.2 | 9.5 | 2.4 | 7.2 | 3.2 |
| Other Disorders | 3.0 | 3.9 | 0.0 | 2.4 | 1.9 | 0.9 | 1.1 | 0.0 | 1.0 | 0.0 | 1.5 | 0.7 | 0.0 | 2.5 | 3.2 |
| Conditions Not Attributable to a Mental Disorder or Diagnosis | 5.0 | 5.1 | 47.1 | 2.9 | 0.0 | 3.4 | 3.7 | 4.1 | 3.1 | 2.4 | 1.0 | 0.5 | 2.4 | 1.1 | 0.0 |
| Deferred | *** | *** | *** | NS | NS | *** | *** | *** | *** | *** | *** | *** | *** | *** | * |

* p < .05

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EXHIBIT 70

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES WITH INCOME FROM VARIOUS SOURCES BY FACILITY TYPE--
 BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
 ALL BENEFICIARIES

| INCOME SOURCES | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|---------------------------|---------------|---------|---------|------|------|--------------------|---------|--------|---------|------|----------------------------|--------|------|--------|--------|
| | ALL | OP | PH | AMHC | PHP | ALL | OP | PH | AMHC | PHP | ALL | OP | PH | AMHC | PHP |
| Number of Cases | 397 | 156 | 13 | 186 | 42 | 2,569 | 1,123 | 159 | 1,018 | 269 | 1,561 | 774 | 247 | 359 | 269 |
| Beneficiary Employment | 2.8 | 3.8 | 0.0 | 2.2 | 2.4 | 1.5 | 1.6 | 1.9 | 1.3 | 1.5 | 3.1*** | 2.3 | 4.0 | 5.0*** | 0.7 |
| Spouse's Income | 2.5 | 3.8 | 0.0 | 1.6 | 2.4 | 2.6 | 4.6 | 0.6 | 1.0 | 0.4 | 3.6 | 4.3 | 2.4 | 3.6** | 1.9 |
| Workers Compensation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | 0.2 | 0.7 | 0.3 | 0.0 | 0.0 | 0.3 | 1.1 |
| Unemployment Compensation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Military Benefits | 2.5 | 3.2** | 7.7 | 1.1 | 4.8 | 3.1 | 4.9 | 3.8 | 1.1 | 3.0 | 3.5 | 0.4*** | 3.2 | 3.1* | 4.8 |
| Social Security | 84.1*** | 76.9*** | 69.2** | 88.2 | 83.3 | 94.5*** | 93.9*** | 92.5** | 96.1*** | 92.9 | 96.5** | 92.6 | 93.9 | 91.6** | 85.1** |
| Other Pension, Disability | 3.3 | 7.3 | 53.9*** | 0.5 | 4.8 | 5.6 | 7.7 | 5.0*** | 3.9* | 4.1 | 4.0* | 3.7*** | 6.5 | 1.9 | 4.5 |
| Public Assistance | 9.3 | 12.2 | 23.1 | 9.7 | 14.3 | 4.2*** | 5.3** | 5.0* | 3.0*** | 4.5* | 13.0*** | 8.4** | 9.7 | 6.7** | 7.4 |
| Other | 3.3 | 5.1 | 15.4 | 0.5 | 4.8 | 3.1 | 3.8 | 8.8 | 1.9 | 1.5 | 4.0 | 3.5 | 6.5 | 3.3 | 3.0 |

* p < .05

** p < .01

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HHS, Office of the Secretary

PERCENT OF BENEFICIARIES WITH INCOME FROM VARIOUS SOURCES BY FACILITY TYPE--
 BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
 BENEFICIARIES UNDER AGE 65

| INCOME SOURCES | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|---------------------------|---------------|-------------|-------------|--------|------|--------------------|-------------|-------------|---------|------|----------------------------|-------------|-------------|--------|------|
| | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP |
| Number of Cases | 144 | 48 | 4 | 56 | 36 | 1,213 | 642 | 90 | 235 | 246 | 953 | 469 | 90 | 148 | 246 |
| Beneficiary Employment | 4.2 | 6.3 | 0.0 | 3.6 | 2.8 | 2.1 | 2.0 | 1.1 | 3.0 | 1.6 | 2.3 | 3.0 | 4.3 | 5.4 | 0.9 |
| Spouse's Income | 2.1 | 2.1 | 0.0 | 1.8 | 2.8 | 3.6 | 6.1 | 1.1 | 0.9 | 0.8 | 4.3 | 4.3 | 2.9 | 8.2*** | 2.1 |
| Workers Compensation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 | 0.0 | 0.4 | 0.8 | 0.4 | 0.0 | 0.0 | 0.7 | 1.3 |
| Unemployment Compensation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Military Benefits | 4.2 | 6.3 | 0.0 | 1.8 | 5.6 | 4.7 | 6.4 | 5.6 | 1.7 | 2.9 | 4.8*** | 4.5 | 3.6 | 5.4 | 5.1 |
| Social Security | 77.1*** | 77.1*** | 75.0 | 71.4** | 86.1 | 93.8*** | 94.9*** | 75.0 | 92.8*** | 92.7 | 96.2* | 93.9 | 92.9** | 87.8 | 90.6 |
| Other Pension, Disability | 3.5 | 6.3 | 0.0 | 0.0 | 5.6 | 3.8 | 4.7 | 2.2 | 2.6 | 3.3 | 3.5 | 2.8 | 5.0 | 2.0 | 4.3 |
| Public Assistance | 18.1** | 14.6 | 25.0 | 23.2* | 8.3 | 5.3*** | 5.0* | 6.7 | 6.4*** | 4.8 | 9.0** | 8.7* | 6.7 | 9.5 | 8.1 |
| Other | 3.5 | 4.2 | 0.0 | 1.8 | 5.6 | 2.2 | 2.3 | 6.7 | 1.3 | 1.2 | 2.5 | 2.4 | 2.1 | 2.0 | 3.0 |

* p < .05

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IHS, Office of the Secretary

PERCENT OF BENEFICIARIES WITH INCOME FROM VARIOUS SOURCES BY FACILITY TYPE--
 BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
 BENEFICIARIES AGE 65 AND OVER

| INCOME SOURCES | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|---------------------------|---------------|---------|-------|------|-------|--------------------|---------|------|------|------|----------------------------|--------|------|--------|------|
| | ALL | OP | PH | AMHC | PHP | ALL | OP | PH | AMHC | PHP | ALL | OP | PH | AMHC | PHP |
| Number of Cases | 253 | 108 | 9 | 130 | 6 | 1,356 | 481 | 69 | 783 | 23 | 608 | 305 | 69 | 211 | 23 |
| Beneficiary Employment | 2.0 | 2.8 | 0.0 | 1.5 | 0.0 | 0.9 | 1.0 | 2.9 | 0.6 | 0.0 | 2.6** | 1.3 | 3.7 | 1.0 | 0.0 |
| Spouse's Income | 2.8 | 4.6 | 0.0 | 1.5 | 0.0 | 1.6 | 2.7 | 0.0 | 1.0 | 4.4 | 2.6 | 4.3 | 1.9 | 4.7*** | 0.0 |
| Workers Compensation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Unemployment Compensation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Military Benefits | 1.6 | 1.9 | 11.1 | 0.8 | 0.0 | 1.7 | 2.9 | 1.5 | 0.9 | 4.4* | 3.1 | 3.9 | 2.8 | 1.4 | 5.6 |
| Social Security | 85.8*** | 76.9*** | 66.7 | 95.4 | 66.7 | 95.2*** | 92.5*** | 92.8 | 97.1 | 95.7 | 97.0 | 90.8 | 92.8 | 94.3 | 94.4 |
| Other Pension, Disability | 11.5** | 22.2*** | 44.4* | 0.8 | 0.0 | 7.7 | 11.6** | 8.7* | 5.0 | 13.0 | 5.1* | 3.3*** | 8.4 | 1.9 | 11.1 |
| Public Assistance | 7.9 | 11.1 | 0.0 | 3.9 | 50.0* | 3.3** | 5.6 | 2.9 | 1.9 | 4.4* | 8.6*** | 7.9 | 2.9 | 4.7* | 5.6 |
| Other | 3.2 | 5.6 | 22.2 | 0.0* | 0.0 | 3.9 | 5.8*** | 11.6 | 2.0 | 4.4 | 6.4* | 5.3 | 12.2 | 4.3 | 5.6 |

* p < .05

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HHS, Office of the Secretary

BENEFICIARY MONTHLY INCOME DISTRIBUTION BY FACILITY TYPE--
 BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
 ALL BENEFICIARIES

| Monthly Income | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|-----------------|---------------|-------|-------|-------|-----|--------------------|-------|-------|-------|-------|----------------------------|-------|-------|-------|-------|
| | ALL | OP | PH | AMHC | PHP | ALL | OP | PH | AMHC | PHP | ALL | OP | PH | AMHC | PHP |
| Number of Cases | 192 | 157 | 25 | 10 | -- | 1,066 | 584 | 193 | 271 | 17 | 648 | 323 | 92 | 208 | 27 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | -- | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1-75 | 11.0 | 11.0 | 16.0 | 0.0 | -- | 5.0 | 3.6 | 9.3 | 5.9 | 0.0 | 3.1 | 4.0 | 5.0 | 1.0 | 0.0 |
| 76-150 | 3.1 | 1.0 | 8.0 | 20.0 | -- | 1.9 | 1.7 | 0.0 | 3.7 | 0.0 | 3.2 | 1.0 | 6.0 | 5.3 | 0.0 |
| 151-225 | 17.9 | 18.0 | 12.0 | 20.0 | -- | 12.4 | 15.6 | 8.8 | 8.1 | 11.8 | 17.9 | 15.0 | 13.0 | 18.8 | 67.0 |
| 226-300 | 11.0 | 11.0 | 8.0 | 20.0 | -- | 13.0 | 13.0 | 14.1 | 12.5 | 5.9 | 21.3 | 24.0 | 13.0 | 22.5 | 7.4 |
| 301-375 | 7.9 | 7.0 | 8.0 | 30.0 | -- | 11.4 | 9.4 | 19.7 | 9.2 | 17.6 | 13.2 | 12.5 | 25.0 | 9.1 | 11.1 |
| 376-450 | 19.1 | 22.0 | 12.0 | 10.0 | -- | 12.7 | 12.0 | 20.1 | 7.4 | 35.3 | 12.3 | 12.0 | 20.0 | 10.5 | 7.2 |
| 451-600 | 13.0 | 12.0 | 20.0 | 0.0 | -- | 12.9 | 13.4 | 10.4 | 13.7 | 11.8 | 14.0 | 14.0 | 11.0 | 16.8 | 0.0 |
| 600+ | 17.0 | 18.0 | 16.0 | 0.0 | -- | 30.7 | 31.3 | 17.6 | 39.5 | 17.6 | 15.0 | 17.5 | 7.0 | 16.3 | 7.2 |
| | *** | *** | NS | NS | | *** | *** | ** | * | | *** | *** | ** | *** | ** |
| Median Income | 358.6 | 383.2 | 357.0 | 263.5 | | 413.2 | 417.8 | 368.4 | 486.3 | 407.3 | 326.7 | 337.0 | 339.1 | 320.2 | 206.7 |

* p < .05

** p < .01

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HHS, Office of the Secretary

BENEFICIARY MONTHLY INCOME DISTRIBUTION BY FACILITY TYPE--
 BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
 BENEFICIARIES UNDER AGE 65

| Monthly Income | BASELINE ONLY | | | | | | DEMONSTRATION ONLY | | | | | | BASELINE AND DEMONSTRATION | | | | | |
|-----------------|---------------|-------|-------|-------|----|----|--------------------|-------|-------|-------|-------|-------|----------------------------|-------|-------|-------|-------|-------|
| | CMHC- | | | CMHC- | | | CMHC- | | | CMHC- | | | CMHC- | | | CMHC- | | |
| | ALL | OP | PH | ALL | OP | PH | ALL | OP | PH | ALL | OP | PH | ALL | OP | PH | ALL | OP | PH |
| Number of Cases | 90 | 74 | 7 | 9 | -- | -- | 520 | 293 | 109 | 107 | 11 | 11 | 435 | 228 | 48 | 148 | 11 | 11 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | -- | -- | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1-75 | 10.0 | 10.8 | 14.3 | 0.0 | -- | -- | 2.9 | 1.0 | 9.2 | 1.9 | 0.0 | 0.0 | 3.0 | 3.9 | 4.2 | 1.4 | 0.0 | 0.0 |
| 76-150 | 1.1 | 0.0 | 0.0 | 11.1 | -- | -- | 2.3 | 1.7 | 0.0 | 6.5 | 0.0 | 0.0 | 3.4 | 1.8 | 8.3 | 4.7 | 0.0 | 0.0 |
| 151-225 | 16.7 | 16.2 | 14.3 | 22.2 | -- | -- | 15.2 | 20.1 | 8.3 | 10.3 | 0.0 | 0.0 | 15.4 | 12.3 | 18.8 | 17.6 | 36.4 | 36.4 |
| 226-300 | 8.9 | 8.1 | 0.0 | 22.2 | -- | -- | 14.0 | 13.7 | 12.8 | 16.8 | 9.1 | 9.1 | 23.0 | 24.1 | 12.5 | 25.0 | 18.2 | 18.2 |
| 301-375 | 13.3 | 12.2 | 0.0 | 33.3 | -- | -- | 15.2 | 11.9 | 24.8 | 13.1 | 27.3 | 27.3 | 12.9 | 13.6 | 16.7 | 9.5 | 27.3 | 27.3 |
| 376-450 | 22.2 | 21.6 | 42.9 | 11.1 | -- | -- | 15.2 | 14.0 | 24.8 | 7.5 | 27.3 | 27.3 | 13.1 | 13.2 | 20.8 | 10.8 | 9.1 | 9.1 |
| 451-600 | 8.9 | 9.5 | 14.3 | 0.0 | -- | -- | 10.8 | 11.9 | 8.3 | 10.3 | 9.1 | 9.1 | 15.2 | 14.5 | 10.4 | 18.9 | 0.0 | 0.0 |
| 600+ | 18.9 | 21.6 | 14.3 | 0.0 | -- | -- | 24.4 | 25.6 | 11.9 | 33.6 | 27.3 | 27.3 | 14.0 | 16.7 | 8.3 | 12.2 | 9.1 | 9.1 |
| Median Income | 375.5 | 385.8 | 413.4 | 282.2 | | | 378.4 | 385.0 | 360.3 | 390.3 | 413.4 | 413.4 | 331.3 | 344.5 | 329.0 | 311.6 | 281.8 | 281.8 |

* p < .05
 ** p < .01
 *** p < .001

HHS, Office of the Secretary

BENEFICIARY MONTHLY INCOME DISTRIBUTION BY
FACILITY TYPE--BASELINE ONLY, DEMONSTRATION
ONLY, OR BOTH PERIODS
BENEFICIARIES AGE 65 AND OVER

| MONTHLY INCOME | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|-----------------|---------------|-------|-------|-------|-----|--------------------|-------|-------|-------|-------|----------------------------|-------|-------|-------|-------|
| | ALL | OP | PH | AMHC | PHP | ALL | OP | PH | AMHC | PHP | ALL | OP | PH | AMHC | PHP |
| Number of Cases | 102 | 83 | 18 | 1 | -- | 546 | 291 | 85 | 164 | 6 | 213 | 93 | 44 | 60 | 16 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | -- | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1-75 | 11.8 | 10.8 | 16.7 | 0.0 | -- | 7.3 | 6.2 | 9.4 | 8.5 | 0.0 | 3.3 | 4.3 | 6.8 | 0.0 | 0.0 |
| 76-150 | 4.9 | 2.4 | 11.1 | 100.0 | -- | 1.5 | 1.7 | 0.0 | 1.8 | 0.0 | 2.8 | 0.0 | 4.5 | 6.7 | 0.0 |
| 151-225 | 18.6 | 20.5 | 11.1 | 0.0 | -- | 9.7 | 11.0 | 9.4 | 6.7 | 33.3 | 23.0 | 20.4 | 6.8 | 21.7 | 87.5 |
| 226-300 | 12.7 | 13.3 | 11.1 | 0.0 | -- | 12.1 | 12.4 | 16.5 | 9.8 | 0.0 | 17.8 | 23.7 | 13.6 | 16.7 | 0.0 |
| 301-375 | 3.9 | 2.4 | 11.1 | 0.0 | -- | 7.7 | 6.9 | 12.9 | 6.7 | 0.0 | 13.6 | 9.7 | 34.1 | 8.3 | 0.0 |
| 376-450 | 17.6 | 21.7 | 0.0 | 0.0 | -- | 10.3 | 10.0 | 14.1 | 7.3 | 50.0 | 10.8 | 8.6 | 18.2 | 10.0 | 6.3 |
| 451-600 | 15.7 | 14.5 | 22.2 | 0.0 | -- | 14.8 | 14.8 | 12.9 | 15.9 | 16.7 | 11.7 | 14.0 | 11.4 | 11.7 | 0.0 |
| 600+ | 14.7 | 14.5 | 16.7 | 0.0 | -- | 36.6 | 37.1 | 24.7 | 43.3 | 0.0 | 16.9 | 19.4 | 4.5 | 25.0 | 6.3 |
| Median Income | 339.4 | 378.5 | 300.5 | 113.5 | | 465.6 | 469.6 | 385.9 | 537.7 | 401.2 | 318.4 | 313.7 | 341.2 | 345.2 | 193.8 |

* p < .05

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PERCENT OF BENEFICIARIES WITH SPECIFIC POTENTIAL PAYOR SOURCES BY FACILITY TYPE--
BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
ALL BENEFICIARIES

| Payor Source | BASELINE ONLY | | | | DEMONSTRATION ONLY | | | | BASELINE AND DEMONSTRATION | | | | | | |
|---------------------------|---------------|-------------|-------------|---------------|--------------------|-------------|-------------|---------------|----------------------------|-------------|-------------|---------------|---------|---------|---------|
| | ALL | CMHC- OP | CMHC- PH | AMHC- PHIP | ALL | CMHC- OP | CMHC- PH | AMHC- PHIP | ALL | CMHC- OP | CMHC- PH | AMHC- PHIP | | | |
| NUMBER OF CASES | 414 | 287 | 11 | 92 | 24 | 2,153 | 1,168 | 167 | 662 | 156 | 1,690 | 884 | 221 | 386 | 199 |
| Self-Pay | 39.4 | 41.5 | 18.2 | 40.2 | 20.8*** | 25.1*** | 36.4 | 23.4 | 11.5*** | 0.6*** | 34.4*** | 41.2* | 25.8 | 40.4*** | 2.5 |
| Medicaid | 44.7* | 42.2* | 54.6 | 50.0 | 50.0 | 43.6 | 34.6* | 27.5 | 57.6 | 69.2 | 51.8*** | 50.2*** | 61.5*** | 55.7 | 40.2*** |
| Title XX | 27.1* | 34.5** | 0.0 | 6.5 | 29.2 | 20.6** | 30.2*** | 43.1* | 1.4* | 6.4** | 32.4*** | 43.9*** | 28.1*** | 4.2** | 41.2*** |
| Private Insurance | 12.8*** | 13.6*** | 27.3 | 9.8 | 8.3 | 18.9** | 11.7 | 17.4 | 33.5*** | 11.5 | 6.9*** | 5.9*** | 12.2 | 8.6*** | 2.5** |
| Vocational Rehabilitation | 0.5 | 0.0 | 0.0 | 1.1 | 4.2 | 0.2 | 0.0 | 0.0 | 0.3 | 1.3 | 1.1*** | 0.1 | 0.0 | 0.3 | 8.5** |
| Veterans Administration | 1.0 | 0.4 | 0.0 | 3.3 | 0.0 | 2.8* | 2.3 | 3.0 | 2.4 | 8.3 | 1.4** | 1.5 | 1.4 | 1.3 | 1.0** |
| CHAMPUS, CHAMPVA | 0.5 | 0.7 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.6 | 0.0 | 0.0 | 0.2 | 0.1 | 0.5 | 0.0 | 0.5 |
| HMO | 0.7 | 0.4 | 0.5* | 0.0 | 0.0 | 0.6 | 0.9 | 1.2 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.3 | 0.0 |
| Other | 6.3** | 5.2** | 0.0 | 9.8 | 8.3 | 2.4*** | 2.8 | 3.0 | 0.6*** | 6.4 | 3.1 | 1.8 | 5.9 | 13.4*** | 8.0 |

| | | |
|-----|---|-------|
| * | P | <.05 |
| ** | P | <.01 |
| *** | P | <.001 |

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES WITH SPECIFIC POTENTIAL PAYOR SOURCES BY FACILITY TYPE--
 BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
 BENEFICIARIES UNDER AGE 65

| Payor Source | BASELINE ONLY | | | | | | DEMONSTRATION ONLY | | | | | | BASELINE AND DEMONSTRATION | | | | | |
|---------------------------|---------------|------|-------|------|------|-----|--------------------|---------|-------|-------|--------|-----|----------------------------|---------|---------|---------|---------|-----|
| | ALL | OP | CMHC- | PH | AMHC | PHP | ALL | OP | CMHC- | PH | AMHC | PHP | ALL | OP | CMHC- | PH | AMHC | PHP |
| NUMBER OF CASES | 197 | 133 | 7 | 41 | 16 | | 1,036 | 617 | 89 | 223 | 107 | | 1,095 | 549 | 129 | 257 | 160 | |
| Self-Pay | 33.0 | 37.6 | 28.6 | 31.7 | 0.0 | | 28.8 | 38.1*** | 32.6 | 14.8* | 0.9 | | 34.2** | 43.4 | 23.3 | 40.1*** | 2.5 | |
| Medicaid | 53.8 | 49.6 | 71.4 | 65.9 | 50.0 | | 44.6* | 34.5 | 29.2 | 69.1 | 64.5 | | 50.9** | 49.7*** | 64.3*** | 57.2** | 33.8*** | |
| Title XX | 26.3 | 31.6 | 0.0 | 7.3 | 43.8 | | 23.4 | 32.6 | 34.8 | 0.0** | 9.4*** | | 32.0*** | 41.0** | 28.7 | 4.7** | 47.5*** | |
| Private Insurance | 8.1 | 9.0 | 0.0 | 7.3 | 6.3 | | 10.7 | 7.6 | 18.0 | 17.5 | 8.4 | | 5.2*** | 5.3 | 5.4** | 7.0*** | 1.9* | |
| Vocational Rehabilitation | 1.0 | 0.0 | 0.0 | 2.4 | 6.3 | | 0.4 | 0.0 | 0.0 | 0.9 | 1.9 | | 1.6* | 0.0 | 0.0 | 0.4 | 10.6* | |
| Veterans Administration | 1.0 | 0.8 | 0.0 | 2.4 | 0.0 | | 4.9* | 3.9 | 5.6 | 4.9 | 10.3 | | 1.2*** | 1.1** | 0.8 | 1.6 | 1.3** | |
| CHAMPUS, CHAMPVA | 0.5 | 0.8 | 0.0 | 0.0 | 0.0 | | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | | 0.2 | 0.0 | 0.8 | 0.0 | 0.6 | |
| HMO | 0.5 | 0.8* | 0.0 | 0.0 | 0.0 | | 0.8 | 1.0 | 2.3 | 0.0 | 0.0 | | 0.1* | 0.2 | 0.0 | 0.0 | 0.0 | |
| Other | 5.1 | 4.5* | 0.0 | 7.3* | 6.3 | | 2.5 | 2.3 | 3.4 | 0.5** | 7.5 | | 2.4*** | 1.3 | 3.9 | 1.2 | 6.9 | |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES WITH SPECIFIC POTENTIAL PAYOR SOURCES BY FACILITY TYPE--
 BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
 BENEFICIARIES AGE 65 AND OVER

| Payor Source | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|---------------------------|---------------|-------------|-------------|------|---------|--------------------|-------------|-------------|---------|--------|----------------------------|-------------|-------------|---------|-------|
| | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP |
| NUMBER OF CASES | 217 | 154 | 4 | 51 | 8 | 1,117 | 551 | 78 | 439 | 49 | 595 | 335 | 92 | 129 | 39 |
| Self-Pay | 45.2** | 44.8 | 0.0 | 47.1 | 62.5*** | 21.8*** | 34.5* | 12.8 | 9.8*** | 0.0*** | 34.8*** | 37.6 | 29.4* | 41.1*** | 2.6 |
| Medicaid | 36.4*** | 35.7** | 25.0 | 37.3 | 50.0 | 42.7 | 34.7 | 25.6 | 51.7 | 79.6 | 53.4*** | 51.0*** | 57.6*** | 52.7 | 66.7 |
| Title XX | 27.6 | 37.0* | 0.0 | 5.9 | 0.0 | 18.1** | 27.6* | 52.6 | 2.1 | 0.0 | 33.3*** | 48.7*** | 27.2** | 3.1 | 15.4* |
| Private Insurance | 0.2*** | 17.5*** | 75.0 | 11.8 | 12.5 | 26.4*** | 16.3 | 16.7* | 41.7*** | 18.4 | 10.1*** | 6.9*** | 21.7 | 11.6*** | 5.1 |
| Vocational Rehabilitation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 |
| Veterans Administration | 0.9 | 0.0 | 0.0 | 3.9 | 0.0 | 0.9 | 0.5 | 0.0 | 1.1** | 4.1 | 1.7 | 2.1 | 2.2 | 0.8 | 0.0 |
| CHAMPUS, CHAMPVA | 0.5 | 0.7 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 1.3 | 0.0 | 0.0 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 |
| HMO | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.9 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.0 | 0.8 | 0.0 |
| Other | 7.4 | 5.8 | 0.0 | 11.8 | 12.5 | 2.3*** | 3.5 | 2.6 | 0.7*** | 4.1 | 4.4* | 2.7 | 8.7 | 3.1 | 12.8 |

* p < .05

** p < .01

*** p < .001

EXHIBIT 79

IHS, Office of the Secretary

PERCENT OF BENEFICIARY SELF-PAY BY FACILITY TYPE--
 BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
 ALL BENEFICIARIES

| SELF-PAY | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | | | | |
|-----------------|---------------|-------|-------|-------|------|--------------------|-------|-------|-------|-------|----------------------------|------|-------|-------|-------|-------|-------|------|
| | ALL | OP | CMHC- | PH | AMHC | PIIP | ALL | OP | CMHC- | PH | AMHC | PIIP | ALL | OP | CMHC- | PH | AMHC | PIIP |
| NUMBER OF CASES | 163 | 119 | 26 | 3 | | 0 | 543 | 425 | 39 | 78 | 7 | | 582 | 364 | 57 | 156 | 5 | |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | | -- | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |
| 0 | 26.3 | 26.9 | 23.1 | 12.5 | -- | -- | 5.3 | 4.2 | 5.1 | 10.3 | 100.0 | | 12.7 | 7.4 | 10.5 | 25.6 | 20.0 | |
| 1 - 10 | 42.9 | 42.0 | 46.2 | 40.0 | -- | -- | 58.0 | 58.3 | 64.1 | 53.8 | 0.0 | | 57.6 | 58.5 | 47.4 | 58.3 | 80.0 | |
| 11 - 20 | 14.7 | 17.6 | 7.7 | 6.3 | -- | -- | 20.6 | 21.6 | 23.1 | 14.1 | 0.0 | | 18.6 | 20.6 | 38.6 | 7.1 | 0.0 | |
| 21 - 30 | 4.9 | 4.2 | 11.5 | 0.0 | -- | -- | 6.3 | 6.6 | 0.0 | 7.6 | 0.0 | | 4.0 | 4.9 | 3.5 | 1.9 | 0.0 | |
| 31 - 40 | 1.2 | 0.8 | 3.8 | 0.0 | -- | -- | 2.8 | 2.8 | 2.6 | 2.6 | 0.0 | | 1.7 | 1.4 | 0.0 | 3.2 | 0.0 | |
| 41 - 50 | 1.2 | 1.7 | 0.0 | 6.3 | -- | -- | 2.0 | 2.4 | 0.0 | 1.3 | 0.0 | | 1.5 | 2.5 | 0.0 | 0.0 | 0.0 | |
| 51 - 60 | 0.6 | 0.8 | 0.0 | 0.0 | -- | -- | 0.9 | 0.7 | 0.0 | 2.6 | 0.0 | | 1.0 | 1.4 | 0.0 | 0.6 | 0.0 | |
| 61 - 70 | 2.5 | 3.4 | 0.0 | 0.0 | -- | -- | 1.1 | 1.2 | 2.6 | 0.0 | 0.0 | | 1.4 | 1.4 | 0.0 | 1.9 | 0.0 | |
| 71 - 80 | 0.6 | 0.8 | 3.8 | 0.0 | -- | -- | 0.6 | 0.7 | 0.0 | 0.0 | 0.0 | | 0.5 | 0.5 | 0.0 | 0.6 | 0.0 | |
| 81 - 90 | 0.0 | 0.0 | 3.8 | 0.0 | -- | -- | 0.4 | 0.5 | 0.0 | 0.0 | 0.0 | | 1.4 | 1.4 | 0.0 | 0.6 | 0.0 | |
| 91 - 100 | 1.8 | 2.5 | 0.0 | 18.8 | -- | -- | 2.0 | 0.9 | 2.6 | 7.7 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| | *** | *** | * | *** | | | *** | *** | * | NS | | | * | NS | NS | ** | ** | ** |

* p < .05

** p < .01

*** p < .001

EXHIBIT 80

HHS, Office of the Secretary

PERCENT OF BENEFICIARY SELF-PAY BY FACILITY TYPE--
 BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
 BENEFICIARIES UNDER AGE 65

| SELF-PAY PERCENT | BASELINE ONLY | | | | | DEMONSTRATION ONLY | | | | | BASELINE AND DEMONSTRATION | | | | |
|------------------|---------------|-------|-------|-------|------|--------------------|-------|-------|-------|-------|----------------------------|-------|-------|-------|-------|
| | CMHC- | | CMHC- | | PHIP | CMHC- | | CMHC- | | PHIP | CMHC- | | CMHC- | | PHIP |
| | ALL | OP | PH | AMHC | | ALL | OP | PH | AMHC | | ALL | OP | PH | AMHC | |
| NUMBER OF CASES | 65 | 50 | 2 | 13 | 0 | 298 | 235 | 29 | 33 | 1 | 375 | 238 | 30 | 103 | 4 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | -- | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 0 | 30.8 | 30.0 | 100.0 | 23.1 | -- | 4.7 | 3.0 | 3.4 | 15.2 | 0.0 | 11.2 | 6.7 | 16.7 | 19.4 | 25.0 |
| 1 - 10 | 36.9 | 32.0 | 100.0 | 61.5 | -- | 67.1 | 67.7 | 69.0 | 63.6 | 0.0 | 61.1 | 59.7 | 56.7 | 65.0 | 75.0 |
| 11 - 20 | 21.5 | 26.0 | 0.0 | 7.7 | -- | 15.4 | 15.7 | 24.1 | 6.1 | 0.0 | 16.8 | 20.6 | 20.0 | 7.8 | 0.0 |
| 21 - 30 | 4.6 | 6.0 | 0.0 | 0.0 | -- | 5.0 | 6.0 | 0.0 | 3.0 | 0.0 | 4.3 | 5.0 | 6.7 | 1.9 | 0.0 |
| 31 - 40 | 0.0 | 0.0 | 0.0 | 0.0 | -- | 3.0 | 3.4 | 0.0 | 3.0 | 0.0 | 1.1 | 0.8 | 0.0 | 1.9 | 0.0 |
| 41 - 50 | 1.5 | 2.0 | 0.0 | 0.0 | -- | 2.0 | 2.1 | 0.0 | 3.0 | 0.0 | 1.9 | 2.9 | 0.0 | 0.0 | 0.0 |
| 51 - 60 | 0.0 | 0.0 | 0.0 | 0.0 | -- | 0.7 | 0.4 | 0.0 | 3.0 | 0.0 | 1.1 | 1.3 | 0.0 | 1.0 | 0.0 |
| 61 - 70 | 1.5 | 2.0 | 0.0 | 0.0 | -- | 1.0 | 1.3 | 0.0 | 0.0 | 0.0 | 1.6 | 1.3 | 0.0 | 2.9 | 0.0 |
| 71 - 80 | 0.0 | 0.0 | 0.0 | 0.0 | -- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.8 | 0.0 | 0.0 | 0.0 |
| 81 - 90 | 0.0 | 0.0 | 0.0 | 0.0 | -- | 0.3 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 91 - 100 | 3.1 | 2.0 | 0.0 | 7.0 | -- | 0.7 | 0.0 | 3.4 | 3.0 | 0.0 | 0.5 | 0.8 | 0.0 | 0.0 | 0.0 |
| | ** | *** | NS | NS | | *** | *** | NS | NS | NS | NS | NS | NS | ** | |

* p < .05

** p < .01

*** p < .001

EXHIBIT 81

HHS, Office of the Secretary

PERCENT OF BENEFICIARY SELF-PAY BY FACILITY TYPE--
BASELINE ONLY, DEMONSTRATION ONLY, AND BASELINE AND DEMONSTRATION
BENEFICIARIES AGE 65 AND OVER

| SELF-PAY PERCENT | BASELINE ONLY | | | | | | DEMONSTRATION ONLY | | | | | | BASELINE AND DEMONSTRATION | | | | | |
|------------------|---------------|-------|-------|-------|-----|--|--------------------|-------|-------|-------|-----|--|----------------------------|-------|-------|-------|-------|----|
| | CMHC- | | | CMHC- | | | CMHC- | | | CMHC- | | | CMHC- | | | CMHC- | | |
| | ALL | OP | PH | AMHC | PHP | | ALL | OP | PH | AMHC | PIP | | ALL | OP | PH | AMHC | PIP | |
| NUMBER OF CASES | | | | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | | | | |
| 0 | 98 | 69 | 24 | 5 | 0 | | 245 | 190 | 10 | 45 | 0 | | 207 | 126 | 27 | 53 | 1 | |
| | 100.0 | 100.0 | 100.0 | 100.0 | -- | | 100.0 | 100.0 | 100.0 | 100.0 | -- | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |
| 1 - 10 | 23.5 | 24.6 | 16.7 | 40.0 | -- | | 6.1 | 5.8 | 10.0 | 6.7 | -- | | 15.5 | 8.7 | 3.7 | 37.7 | 0.0 | |
| | 46.9 | 49.3 | 50.0 | 0.0 | -- | | 46.9 | 46.8 | 50.0 | 46.7 | -- | | 51.2 | 52.3 | 37.0 | 45.3 | 100.0 | |
| 11 - 20 | 10.2 | 11.6 | 8.3 | 0.0 | -- | | 26.9 | 28.9 | 20.0 | 20.0 | -- | | 21.7 | 20.6 | 59.3 | 5.7 | 0.0 | |
| 21 - 30 | 5.1 | 2.9 | 12.5 | 0.0 | -- | | 7.8 | 7.4 | 0.0 | 11.1 | -- | | 3.4 | 4.8 | 0.0 | 1.9 | 0.0 | |
| 31 - 40 | 2.0 | 1.4 | 4.2 | 0.0 | -- | | 2.4 | 2.1 | 10.0 | 2.2 | -- | | 2.9 | 2.4 | 0.0 | 5.7 | 0.0 | |
| 41 - 50 | 2.0 | 1.4 | 0.0 | 20.0 | -- | | 2.0 | 2.6 | 0.0 | 0.0 | -- | | 1.0 | 1.6 | 0.0 | 0.0 | 0.0 | |
| 51 - 60 | 1.0 | 1.4 | 0.0 | 0.0 | -- | | 1.2 | 1.1 | 0.0 | 2.2 | -- | | 1.0 | 1.6 | 0.0 | 0.0 | 0.0 | |
| 61 - 70 | 3.1 | 4.3 | 0.0 | 0.0 | -- | | 1.2 | 1.1 | 10.0 | 0.0 | -- | | 1.0 | 1.6 | 0.0 | 0.0 | 0.0 | |
| 71 - 80 | 2.0 | 1.4 | 4.2 | 0.0 | -- | | 1.2 | 1.6 | 0.0 | 0.0 | -- | | 0.5 | 0.0 | 8.8 | 1.9 | 0.0 | |
| 81 - 90 | 1.0 | 0.0 | 4.2 | 0.0 | -- | | 0.4 | 0.5 | 0.0 | 0.0 | -- | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 91 - 100 | 3.1 | 1.4 | 0.0 | 40.0 | -- | | 3.7 | 2.1 | 0.0 | 11.1 | -- | | 1.9 | 2.4 | 0.0 | 1.9 | 0.0 | |
| | NS | NS | ** | *** | | | *** | ** | NS | ** | | | NS | NS | NS | NS | NS | NS |

* p < .05
** p < .01
*** p < .001

HHS, Office of the Secretary

PORPORTION OF DEMONSTRATION AND TOTAL PARTIAL
HOSPITALIZATION HOURS OF CARE BY FACILITY

| Facilities | FIRST YEAR | | | SECOND YEAR | | | TOTAL DEMONSTRATION | | |
|---|--------------------------------|------------------------|-----------------------------|--------------------------------|------------------------|-----------------------------|--------------------------------|------------------------|-----------------------------|
| | Demonstration Hours of Care | Total Hours of Care | Percentage Demonstration | Demonstration Hours of Care | Total Hours of Care | Percentage Demonstration | Demonstration Hours of Care | Total Hours of Care | Percentage Demonstration |
| CMHC/Partial Hospitalization | | | | | | | | | |
| 1 | 24,494 | 37,976 | 64.50% | 4,901* | 7,727* | 63.43% | 29,395* | 45,703* | 64.32% |
| 2 | 8,750 | 66,854 | 13.09 | 9,864 | 63,752 | 15.47% | 18,614 | 130,606 | 14.25% |
| 3 | 3,389 | 28,446 | 11.91 | 6,738 | 38,322 | 17.63 | 10,147 | 66,768 | 15.20 |
| 4 Data Not Available | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 5 | 19,756 | 42,792 | 46.17 | 20,409 | 39,119 | 52.17 | 40,165 | 81,911 | 49.03 |
| 6 | 8,142 | 13,358 | 60.95 | 8,118* | 9,503* | 85.43 | 16,260* | 22,861* | 71.13 |
| 7 Data Not Available | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 8 | 6,644 | 26,924 | 24.68 | 7,456 | 29,322 | 25.43 | 14,100 | 56,246 | 25.07 |
| 9 | 8,859 | 8,859 | 100 | 1,073 | 1,073 | 100 | 9,932 | 9,932 | 100 |
| 10 | 2,881 | 20,459 | 14.08 | 4,689 | 31,608 | 14.83 | 7,570 | 52,067 | 14.54 |
| 11 | 56,919 | 160,065 | 35.56 | 59,545 | 139,237 | 42.77 | 116,464 | 299,302 | 38.91 |
| 12 | 3,813 | 8,845 | 43.11 | 11,517 | 24,042 | 47.90 | 15,330 | 32,887 | 46.61 |
| 13 | 5,186 | 34,745 | 14.93 | 18,532 | 124,143 | 14.93 | 23,718 | 158,888 | 14.93 |
| 14 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 15 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total CMHC | 139,974 | 449,323 | 31.15 | 151,789 | 507,848 | 29.89 | 291,763 | 957,171 | 30.48 |
| Partial Hospitalization Programs (PHIP) | | | | | | | | | |
| 31 | 44,828 | 110,489 | 40.57 | 48,203 | 110,198 | 43.74 | 93,031 | 220,687 | 42.16 |
| 32 | 4,394 | 22,332 | 19.68 | 2,939 | 22,737 | 12.93 | 7,333 | 45,069 | 16.27 |
| 33 | 19,661 | 67,271 | 29.23 | 23,759 | 80,194 | 29.63 | 43,420 | 147,465 | 29.44 |
| 34 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 35 | 2,451 | 13,975 | 17.54 | 657* | 3,749* | 17.52 | 3,108* | 17,724* | 17.54 |
| 36 | 22,988 | 70,803 | 32.47 | 26,774 | 72,109 | 37.13 | 49,762 | 142,912 | 34.82 |
| 37 | 11,607 | 54,065 | 21.47 | 10,534 | 53,937 | 19.53 | 22,141 | 108,002 | 20.50 |
| 38 | 25,461 | 62,221 | 40.92 | 26,355 | 76,247 | 34.57 | 51,816 | 138,468 | 37.42 |
| 39 | 21,217 | 82,230 | 25.80 | 26,483 | 72,839 | 36.36 | 47,700 | 155,069 | 30.76 |
| 40 Data Not Available | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 41 | 10,481 | 23,186 | 45.20 | 9,812 | 18,483 | 53.09 | 20,293 | 41,669 | 48.70 |
| 42 | 10,221 | 24,980 | 40.92 | 10,629 | 24,831 | 42.81 | 20,850 | 49,811 | 41.86 |
| 43 | 6,745 | 8,675 | 77.75 | 7,928 | 8,756 | 90.54 | 14,673 | 17,431 | 84.18 |
| 44 | 20,708 | 100,852 | 20.53 | 44,756 | 192,608 | 23.24 | 65,464 | 293,460 | 22.31 |
| 45 | 5,837 | 16,605 | 35.15 | 11,468 | 42,340 | 27.09 | 17,305 | 58,945 | 29.36 |
| Total PHIP | 206,599 | 657,684 | 31.41 | 250,297 | 779,028 | 32.13 | 456,896 | 1,436,712 | 31.80 |
| Grand Total | 346,573 | 1,107,007 | 31.31 | 402,086 | 1,286,876 | 31.25 | 748,659 | 2,393,883 | 31.27 |

* Data Not Complete For Facility.

HHS, Office of the Secretary

PROPORTION OF DEMONSTRATION AND TOTAL ENCOUNTERS BY FACILITY

| Facilities | FIRST YEAR | | | SECOND YEAR | | | TOTAL DEMONSTRATION | | |
|--------------------------|--------------------------|------------------|--------------------------|--------------------------|------------------|--------------------------|--------------------------|------------------|--------------------------|
| | Demonstration Encounters | Total Encounters | Percentage Demonstration | Demonstration Encounters | Total Encounters | Percentage Demonstration | Demonstration Encounters | Total Encounters | Percentage Demonstration |
| CNHC | | | | | | | | | |
| Ambulatory Care | | | | | | | | | |
| 1 | 950 | 24,278 | 3.91% | 223* | 5,472* | 4.08% | 1,173* | 29,750* | 3.94% |
| 2 | 2,101 | 26,306 | 7.99 | 2,504 | 29,757 | 8.41 | 4,605 | 56,063 | 8.21 |
| 3 | 1,166 | 19,914 | 5.86 | 1,371 | 21,931 | 6.25 | 2,537 | 41,845 | 6.06 |
| 4 | 558* | 13,970* | 3.99 | -- | -- | -- | 558* | 13,970* | 3.99 |
| 5 | 266 | 13,299 | 2.00 | 326 | 13,328 | 2.45 | 592 | 26,627 | 2.22 |
| 6 | 4,947 | 13,335 | 37.10 | 2,872* | 5,095* | 56.37 | 7,819* | 18,430* | 42.43 |
| 7 Data Not Available | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 8 | 847 | 35,092 | 2.41 | 781 | 35,376 | 2.21 | 1,628 | 70,468 | 2.31 |
| 9 | 9,713 | 38,827 | 25.02 | 9,235 | 40,935 | 22.56 | 18,948 | 79,762 | 23.76 |
| 10 | 341 | 2,119 | 16.09 | 939 | 2,430 | 38.64 | 1,280 | 4,549 | 28.14 |
| 11 | 3,023 | 23,344 | 12.95 | 4,178 | 35,898 | 11.64 | 7,201 | 59,242 | 12.16 |
| 12 | 1,823 | 18,540 | 9.83 | 1,889 | 17,642 | 10.71 | 3,712 | 36,182 | 10.26 |
| 13 | 668 | 49,291 | 1.36 | 1,424 | 58,569 | 2.43 | 2,092 | 107,860 | 1.94 |
| 14 | 1,023 | 43,597 | 2.35 | 3,607 | 158,641 | 2.27 | 4,630 | 202,238 | 2.29 |
| 15 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total CNHC | 27,426 | 321,912 | 8.52% | 29,349 | 425,074 | 6.90% | 56,775 | 746,986 | 7.60% |
| Ambulatory Clinics | | | | | | | | | |
| 16 | 574 | 8,273 | 6.94% | 928 | 8,821 | 10.52% | 1,502 | 17,094 | 8.79 |
| 17 | 2,309 | 46,548 | 4.96 | 2,120 | 46,453 | 4.56 | 4,429 | 93,001 | 4.76 |
| 18 | 3,384 | 29,461 | 11.49 | 4,818 | 35,242 | 13.67 | 8,202 | 64,703 | 12.68 |
| 19 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 20 | 346 | 8,278 | 4.18 | 596 | 7,401 | 8.05 | 942 | 15,679 | 6.01 |
| 21 | 617 | 10,727 | 5.75 | 1,231 | 14,471 | 8.51 | 1,848 | 25,198 | 7.33 |
| 22 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 23 | 2,540 | 11,657 | 21.79 | 4,155 | 15,209 | 27.32 | 6,695 | 26,866 | 24.92 |
| 24 | 1,240 | 8,215 | 15.09 | 1,091 | 7,582 | 14.39 | 2,331 | 15,797 | 14.76 |
| 25 | 1,366 | 12,280 | 11.12 | 1,526 | 14,973 | 10.19 | 2,892 | 27,253 | 10.61 |
| 26 | 798* | 3,306* | 24.14 | -- | -- | -- | 798* | 3,306* | 24.14 |
| 27 | 3,139 | 9,166 | 34.25 | 5,321 | 9,256 | 57.49 | 8,460 | 18,422 | 45.92 |
| 28 | 2,024 | 26,181 | 7.73 | 2,286 | 30,279 | 7.55 | 4,310 | 56,460 | 7.63 |
| 29 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 30 | 648 | 28,538 | 2.27 | 1,087 | 42,425 | 2.56 | 1,735 | 70,963 | 2.44 |
| Total Ambulatory Clinics | 18,985 | 202,630 | 9.37% | 25,159 | 232,112 | 10.84% | 44,144 | 434,742 | 10.15% |

* Data not complete for facility.

AMBULATORY SERVICE ENCOUNTERS, DEMONSTRATION
TOTALS AND PERCENTS FOR BENEFICIARIES TO TOTAL CASELOAD
BY TYPE OF PROVIDER AND FACILITY

| Type of Provider and Facility | First Year | | | Second Year | | | Total Demonstration | | |
|-------------------------------|--------------------------|------------------|--------------------------|--------------------------|------------------|--------------------------|--------------------------|------------------|--------------------------|
| | Demonstration Encounters | Total Encounters | Percentage Demonstration | Demonstration Encounters | Total Encounters | Percentage Demonstration | Demonstration Encounters | Total Encounters | Percentage Demonstration |
| Non-Psychiatric Physician | | | | | | | | | |
| CMHC | 405 | 3,496 | 11.58% | 328 | 3,378 | 9.71% | 733 | 6,874 | 10.66% |
| AMHC | 135 | 525 | 25.71 | 27 | 221 | 12.22 | 162 | 746 | 21.72 |
| PHP | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Grand Total | 540 | 4,021 | 13.43 | 355 | 3,599 | 9.86 | 895 | 7,620 | 11.75 |
| Psychiatrist | | | | | | | | | |
| CMHC | 10,272 | 57,538 | 17.85 | 10,603 | 71,470 | 14.84 | 20,875 | 129,008 | 16.18 |
| AMHC | 3,980 | 29,833 | 13.34 | 5,487 | 32,796 | 16.73 | 9,467 | 62,629 | 15.12 |
| PHP | 67 | 1,138 | 5.89 | 67 | 2,053 | 3.26 | 134 | 3,191 | 4.20 |
| Grand Total | 14,319 | 88,509 | 16.18 | 16,157 | 106,319 | 15.20 | 30,476 | 194,828 | 15.64 |
| Psychologist | | | | | | | | | |
| CMHC | 488 | 22,832 | 2.14 | 689 | 38,352 | 1.80 | 1,177 | 61,184 | 1.92 |
| AMHC | 1,418 | 17,097 | 8.29 | 1,488 | 15,830 | 9.40 | 2,906 | 32,927 | 8.83 |
| PHP | 156 | 1,353 | 11.53 | 24 | 1,602 | 1.50 | 180 | 2,955 | 6.09 |
| Grand Total | 2,062 | 41,282 | 4.99 | 2,201 | 55,784 | 3.95 | 4,263 | 97,066 | 4.39 |
| Psychiatric Social Worker | | | | | | | | | |
| CMHC | 7,147 | 64,015 | 11.16 | 5,940 | 87,633 | 6.78 | 13,087 | 151,648 | 8.63 |
| AMHC | 6,843 | 75,815 | 9.03 | 10,464 | 92,428 | 11.32 | 17,307 | 168,243 | 10.29 |
| PHP | 3 | 382 | 0.79 | 4 | 774 | 0.52 | 7 | 1,156 | 0.61 |
| Grand Total | 13,993 | 140,212 | 9.98 | 16,408 | 180,835 | 9.07 | 30,401 | 321,047 | 9.47 |
| Psychiatric Nurse | | | | | | | | | |
| CMHC | 390 | 6,381 | 6.11 | 332 | 10,463 | 3.17 | 722 | 16,844 | 4.29 |
| AMHC | 210 | 548 | 38.32 | 231 | 318 | 72.64 | 441 | 866 | 50.92 |
| PHP | 1 | 359 | 0.28 | 0 | 519 | 0.00 | 1 | 878 | 0.11 |
| Grand Total | 601 | 7,288 | 8.25 | 563 | 11,300 | 4.98 | 1,164 | 18,588 | 6.26 |
| Other Psychologist | | | | | | | | | |
| CMHC | 687 | 23,753 | 2.89 | 825 | 32,444 | 2.54 | 1,512 | 56,197 | 2.69 |
| AMHC | 841 | 14,806 | 5.68 | 1,180 | 14,187 | 8.32 | 2,021 | 28,993 | 6.97 |
| PHP | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Grand Total | 1,528 | 38,559 | 3.96 | 2,005 | 46,631 | 4.30 | 3,533 | 85,190 | 4.15 |

EXHIBIT 84(2)

| Type of Provider and Facility | First Year | | | Second Year | | | Total Demonstration | | |
|-------------------------------|--------------------------|------------------|--------------------------|--------------------------|------------------|--------------------------|--------------------------|------------------|--------------------------|
| | Demonstration Encounters | Total Encounters | Percentage Demonstration | Demonstration Encounters | Total Encounters | Percentage Demonstration | Demonstration Encounters | Total Encounters | Percentage Demonstration |
| Other Social Workers | | | | | | | | | |
| CMHC | 1,949 | 20,751 | 9.39% | 1,972 | 22,103 | 8.92% | 3,921 | 42,854 | 9.15% |
| AMHC | 348 | 13,755 | 2.53 | 314 | 16,057 | 1.96 | 662 | 29,812 | 2.22 |
| PIIP | 6 | 1,042 | 0.58 | 18 | 1,325 | 1.36 | 24 | 2,367 | 1.01 |
| Grand Total | 2,303 | 35,548 | 6.48 | 2,304 | 39,485 | 5.84 | 4,607 | 75,033 | 6.14 |
| Other Nurses | | | | | | | | | |
| CMHC | 2,297 | 23,598 | 9.73 | 2,974 | 32,372 | 9.19 | 5,271 | 55,970 | 9.42 |
| AMHC | 3,559 | 25,977 | 13.70 | 3,997 | 29,206 | 13.69 | 7,556 | 55,183 | 13.69 |
| PIIP | 128 | 232 | 55.17 | 99 | 411 | 24.09 | 227 | 643 | 35.30 |
| Grand Total | 5,984 | 49,807 | 12.01 | 7,070 | 61,989 | 11.41 | 13,054 | 111,796 | 11.68 |
| Counselors | | | | | | | | | |
| CMHC | 2,641 | 78,584 | 3.36 | 3,925 | 85,883 | 4.57 | 6,566 | 164,467 | 3.99 |
| AMHC | 842 | 18,688 | 4.51 | 1,225 | 24,832 | 4.93 | 2,067 | 43,520 | 4.75 |
| PIIP | 1 | 22 | 4.55 | 12 | 1,243 | 0.97 | 13 | 1,265 | 1.03 |
| Grand Total | 3,484 | 97,294 | 3.58 | 5,162 | 111,958 | 4.61 | 8,646 | 209,252 | 4.13 |
| Recreation Therapist | | | | | | | | | |
| CMHC | 102 | 1,491 | 6.84 | 239 | 1,528 | 15.64 | 341 | 3,019 | 11.30 |
| AMHC | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| PIIP | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Grand Total | 102 | 1,491 | 6.84 | 239 | 1,528 | 15.64 | 341 | 3,019 | 11.30 |
| Expressive Arts Therapist | | | | | | | | | |
| CMHC | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AMHC | 487 | 705 | 69.08 | 131 | 189 | 69.31 | 618 | 894 | 69.13 |
| PIIP | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Grand Total | 487 | 705 | 69.08 | 131 | 189 | 69.31 | 618 | 894 | 69.13 |
| Other Therapist | | | | | | | | | |
| CMHC | 1,048 | 19,473 | 5.38 | 1,522 | 39,448 | 3.86 | 2,570 | 58,921 | 4.36 |
| AMHC | 322 | 4,881 | 6.60 | 615 | 6,048 | 10.17 | 937 | 10,929 | 8.57 |
| PIIP | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Grand Total | 1,370 | 24,354 | 5.63 | 2,137 | 45,496 | 4.70 | 3,507 | 69,850 | 5.02 |
| All Staff | | | | | | | | | |
| CMHC | 27,426 | 321,912 | 8.52 | 29,349 | 425,074 | 6.90 | 56,775 | 746,986 | 7.60 |
| AMHC | 18,985 | 202,630 | 9.37 | 25,159 | 232,112 | 10.84 | 44,144 | 434,742 | 10.15 |
| PIIP | 362 | 4,528 | 7.99 | 224 | 7,927 | 2.83 | 586 | 12,455 | 4.70 |
| Grand Total | 46,773 | 529,070 | 8.84 | 54,732 | 665,113 | 8.23 | 101,505 | 1,194,183 | 8.50 |

3. HOW WERE THE CHARGES, COSTS, AND REIMBURSEMENTS FOR MENTAL HEALTH SERVICES AFFECTED BY THE DEMONSTRATION?

In this section, charges, costs, and reimbursements involving Medicare in both the baseline and demonstration periods, are presented. In addition, 5 year site revenues collected at the end of the MMHD are also presented. Data were principally derived from abstracting done in the field, the ODR billings, the ODR Cost Reports, and the QSRs. For this reason, data will not always be in agreement across tabulations, e.g., not all of the audited cost reports had been finalized. A great deal of adjusting of cost report data was also necessary to allow for demonstration year reporting. In addition, records that were abstracted in the baseline period sometimes contained charges with no encounters or vice versa. Therefore it was not possible to simply aggregate all charges and divide by the aggregated total of encounters to determine the cost or charge per encounter. Rather, only those records containing both charges and encounters were used for these calculations.

In essence, this section treats charges per ambulatory service encounter or hour of partial hospitalization, charges per beneficiary, the impact of the \$750 limit, costs per ambulatory encounter or hour of partial hospitalization, costs per beneficiary, a comparison of charges, costs, and reimbursements, and revenues by source and amount by facility type.

(1) Were There Differences In The Per Unit Charges To Medicare For Mental Health Services From The Baseline To Demonstration Periods?

The demonstration was expected to have an impact on the charges for services that facilities billed to Medicare as they built up experience in providing services. Presumably, as facilities gained experience in establishing the actual cost of service provision (through the ODR Cost reporting system) under the demonstration guidelines, charges would be brought in line with actual costs over the long run. It was for this reason that a comparison of the charges per unit of service (and total chargers per beneficiary--see next question) in the baseline and demonstration periods was undertaken. These charges could then be compared to comparable measures of cost.

The charge data were derived from two different sources. Baseline services and the associated charges to Medicare were recorded by the Macro field team using the Beneficiary Clinical Abstracting Form as they abstracted retrospective data from each of the facilities' billing systems. As such, the data are limited by the accuracy and completeness of the records maintained by the demonstration facilities over the past several years. On the other hand, the demonstration charge data were reported data taken from the MMHD Billing Form, submitted to ODR (usually on a monthly basis) for all services charged to Medicare under the demonstration.

Per unit charges were defined differently for outpatient and partial hospitalization services by design of the demonstration billing and reimbursement system. Outpatient service units were reported as "encounters" of service, whereas partial hospitalization services were reported as hours. As such, charges per unit of service were computed as charges per encounter (for outpatient services) and charges per hour (for partial hospitalization services). Only service units with positive charges and positive encounters were included in the computations.

Comparing the per unit charges to Medicare in the baseline period to the per unit charges in the demonstration is somewhat problematic due to the extremely limited number of charges in the baseline. Many facilities simply did not charge Medicare for services prior to the demonstration. For this reason, these aggregate data should be viewed with extreme caution. The ambulatory/outpatient charges per encounter are presented first, followed by the partial hospitalization chargers per hour.

Exhibit 85 displays the charges per encounter for all outpatient services combined by facility type (CMHC, AMHC, PHP) and for \$750 limit versus no limit facilities. As can be seen below, the charge per encounter across all services was \$28 in the baseline period and increased by 4 percent in the demonstration (\$29). However, these data are best viewed by facility type because of their disparate pattern as shown below.

PER ENCOUNTER CHARGES--PERCENT INCREASE
(BASELINE TO DEMONSTRATION)

| | <u>All</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> |
|-------------|------------|-------------|-------------|------------|
| All | +3.3% | -14.0 | +35.4% | +168.3% |
| \$750 Limit | +0.39 | - 9.2 | +46.2% | -- |
| No Limit | +9.9 | -17.9 | +19.5 | +168.3 |

Curiously enough, for CMHCs, with or without the \$750 limit, charges per encounter decreased substantially. For the AMHCs, both the limit and no limit facilities increased their Medicare charges per encounter; however, the charges increased at a faster rate in the limit facilities. PHPs (no limit only) experienced the greatest increase in charges per encounter, which is not too surprising since most PHPs neither separately identified nor charged separately for such services in the baseline period. Exhibits 86 and 87 display charges per encounter by type of service and type of personnel, respectively. As shown below, no particular pattern emerges in per encounter charges from the baseline to demonstration by type of service.

PER ENCOUNTER CHARGES BY SERVICE TYPE--
PERCENT INCREASE (BASELINE TO DEMONSTRATION)

| | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> |
|--------------------------------|-------------|-------------|------------|
| Individual Therapy | -8.3% | +24.6% | +238.5% |
| Group Therapy | -21.9 | +132.4 | +104.3 |
| Medication Therapy | -22.1 | -40.1 | -13.2 |
| Other Mental Health Services | +11.8 | * | * |
| Other Therapeutic Services | +10.7 | * | * |
| Other Diagnostic Services | +93.8 | * | * |
| Psychosocial History--Intake | +5.7 | +43.8 | * |
| Psychiatric/Psychological Exam | -30.1 | +34.6 | * |
| Other | -13.3 | * | * |

* Less than 20 cases in either baseline or demonstration period.

Similarly, there does not appear to be a pattern in the changes in per encounter charges from baseline to demonstration by personnel type.

PER ENCOUNTER CHARGES BY PERSONNEL TYPE--
PERCENT INCREASE (BASELINE TO DEMONSTRATION)

| | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> |
|-------------------------------|-------------|-------------|------------|
| Psychiatrist | -17.4% | +31.6% | +100.4% |
| Nonpsychiatric Physician | * | * | * |
| QMHP Psychologist | +8.3 | -31.4 | * |
| Other Psychologist | * | -14.9 | * |
| Psychiatric Nurse | +44.4 | * | * |
| Other Nurse | -38.1 | -26.4 | -49.7 |
| Psychiatric Social Worker | -20.8 | +54.8 | +184.3 |
| Other Social Worker | -1.4 | -6.0 | * |
| Counselor | -12.4 | +26.4 | +197.4 |
| Recreation Therapist | * | * | * |
| Expressive Arts Therapist | * | * | * |
| Other Mental Health Personnel | +24.0 | * | * |

* Less than 20 cases in either baseline or demonstration period.

Exhibit 88 displays the charges per hour for partial hospitalization services for CMHC-PHs and PHPs. As can be seen below, the charge per hour for partial hospitalization was \$8.04 in the baseline period and decreased by 26 percent in the demonstration (\$5.98) over all CMHC-PHs and PHPs.

PERCENT INCREASE (BASELINE TO DEMONSTRATION)

| <u>All</u> | <u>CMCH-PH</u> | <u>PHP</u> |
|------------|----------------|------------|
| -25.6% | -12.3% | -35.09% |

Although partial hospitalization charges per hour were somewhat less in the PHPs (\$6.68) than in the CMHC-PHs (\$9.85) in the baseline period, PHPs experienced a substantially larger drop in charges per hour than did

CMHC-PHs from baseline to demonstration. One of the reasons for this latter finding may be that under the demonstration, PHPs were allowed reimbursement for "nonroutine" partial hospitalization services, separately detailed as outpatient encounters.

(2) Were There Differences In The Per Beneficiary Charges To Medicare For Mental Health Services From The Baseline To Demonstration Periods?

In addition to the per unit charges to Medicare, it is important to examine the per beneficiary charges to Medicare. Once again, these data should be viewed with caution because of the small number of beneficiaries in the baseline for whom Medicare was billed for baseline services in the facilities, and the fact that facilities, in general, only billed for physician services in the baseline period. The charges per beneficiary (including all services provided by the facility) were computed using two windows of time. One window included the year prior to the start of the demonstration and the year subsequent to the start of the demonstration (see Exhibit 89). The other window included the full two years of the baseline period and the full demonstration period (see Exhibit 90). In both cases, the per beneficiary charges are presented by facility type, limit versus no limit, beneficiaries under age 65, and age 65 and over, and beneficiaries with and without previous mental health treatment.

As seen below, per beneficiary charges increased substantially for all three types of facilities, with and without the limit.

PER BENEFICIARY CHARGES TO MEDICARE--PERCENT INCREASE
(ONE YEAR PRE-DEMONSTRATION VERSUS FIRST YEAR
OF DEMONSTRATION)

| | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> |
|-------------|-------------|-------------|------------|
| \$750 Limit | +16.2% | +50.5% | -- |
| No Limit | +40.6 | +124.6 | +485.4 |

A 2-way analysis of variance with unbalanced cells was employed to test the effect of the baseline versus demonstration and the limit versus no limit conditions on the per beneficiary charges for the CMHCs and AMHCs. The baseline-demonstration effect was not significant for the CMHCs, but was significant for the AMHCs (p less than .005). The limit condition factor was significant (p less than .005) for both the CMHCs and the AMHCs. The 2-way interaction effect (limit condition) by (baseline-demonstration) was not significant in either case. For PHPs, a one-way analysis of variance, testing the effect of baseline versus demonstration revealed a significant difference at the p less than .005 level.

It was curious that the limit facilities had substantially higher per beneficiary charges than the no limit facilities in the baseline period, particularly since the limit conditions were assigned at random in the MMHD design.

Moreover, the following relationships are of interest:

- . No limit facilities increased charges per beneficiary at a faster rate than limit facilities for both CMHCs and AMHCs, particularly in the AMHCs. However, this may have been largely due to the fact that no limit facilities had significantly lower per beneficiary charges to begin with in the baseline period.
- . PHPs experienced the greatest increase in charges per beneficiary and CMHCs the least increase.
- . For the most part, charges per beneficiary increased at a faster rate for the elderly than for the younger population.

When the per beneficiary charges are viewed over the entire baseline and demonstration, the changes are somewhat more dramatic but exhibit the same pattern. It must be remembered, however, that these charges were accumulated over a four-year period.

PER BENEFICIARY CHARGES TO MEDICARE--PERCENT
INCREASE (TWO YEARS OF BASELINE VERSUS
TWO YEARS OF DEMONSTRATION

| | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> |
|-------------|-------------|-------------|------------|
| \$750 Limit | +74.7% | +95.1% | -- |
| No Limit | +206.5% | +306.9% | +911.0% |

(3) What Proportion Of Beneficiaries Reached The \$750 Limit?

This section presents data on the numbers of beneficiaries reaching the \$750 limit in those CMHCs and AMHCs to which the limit applied. Fourteen facilities (eight CMHCs and six AMHCs) were subject to the annual limit. Exhibit 91(1) displays the distribution of charges made for one full year of the demonstration by limit and no-limit facilities directed into class intervals of \$250.

Overall, 56 percent of the beneficiaries in the \$750 limit facilities reached the limit. For the AMHCs, more (65 percent) beneficiaries reached the limit than did in the CMHCs (47 percent). In addition, the distributions of the limit facilities are somewhat different in that the CMHCs had 10 percent of their beneficiaries with charges in excess of \$2,500. Presumably these were partial hospitalization clients.

Overall some 55 percent of all beneficiaries (without regard to the limit) had annual charges less than \$250. The distribution of charges in the no limit facilities was slightly more skewed to the high charges, i.e., there were slightly more beneficiaries failing between \$1,000 and \$2,500 than in the limit facilities. The proportion of beneficiaries with annual charges in excess of \$2,500 for the no limit facilities (7 percent) was also larger than that for the limit facilities (5 percent). The PHP no limit facilities were significantly different from the other no limit and limit facilities. Only 19 percent of their beneficiaries had charges less than \$250 annually and 25 percent had charges greater than \$2,500 annually.

Exhibit 91(2) shows the distribution of charges by age group (those under 65 versus those 65 and over). The exhibit shows clearly that the population of beneficiaries under 65 had charges higher than older beneficiaries. For limit facilities, 49 percent of beneficiaries under 65 had \$0 to \$250 in charges while 61 percent of elderly beneficiaries did. For no limit facilities, the figures were 52 and 59 percent, respectively. Approximately one-third of the younger beneficiaries had charges greater than \$500, as opposed to only one-quarter of the older beneficiaries.

(4) What Were The Costs Per Encounter (Hour) Under The MMHD?

Previously noted was the need to divide the three types of facilities--CMHCs, AMHCs, and PHPs--into their service components for analytical purposes. This produces tabulations of costs per encounter for ambulatory services in all three types of facilities and costs per hour for partial hospitalization in CMHCs and PHPs.

Costs per ambulatory service encounter and costs per partial hospitalization hour were computed from data submitted by the facilities on their Annual Cost Reports. We note that, because the demonstration start-up date of April 15 did not coincide with any of the sites' various fiscal years, numerous adjustments had to be made to the raw data to fit the reporting scheme utilized herein. Only audited cost reports were used to compile these tables, although final settlement has not been attained by all sites. Data on the cost reports are allocated only to types of providers and partial hospitalization services in general, and not to types of services, so that only tabulations of costs by type of provider and partial hospitalization are possible. The following analyses are presented:

- . Ambulatory service costs, number of encounters, and cost per encounter (Exhibit 92)
 - By facility, type of facility, and overall
 - By year of the demonstration
 - For the entire demonstration

- . Ambulatory service costs, number of encounters, and cost per encounter (Exhibit 93)
 - By type of provider, type of facility, and overall
 - By year of the demonstration
 - For the entire demonstration
- . Partial hospitalization costs, number of hours, and cost per hour (Exhibit 94)
 - By facility, type of facility, and overall
 - By year of the demonstration
 - For the entire demonstration

The first of these exhibits depicts the costs and encounters attributable to ambulatory services in all three types of facilities. As the demonstration evolved, it was clear that both costs and encounters increased. This exhibit also shows costs per encounter for the three types of facilities. The findings are as follows:

- . Across all providers and facilities, the cost per encounter for the first year of the demonstration was \$44. Combined with a second-year cost of \$49, the cost per encounter for all facilities for the entire demonstration was \$47.
- . The cost per encounter varied by facility type as follows:
 - CMHCs
 - .. First year--\$41 (from \$17 to \$101)
 - .. Second year--\$47 (from \$35 to \$98)
 - .. Total demonstration--\$44 (from \$35 to \$99)
 - AMHCs
 - .. First year--\$50 (from \$26 to \$85)
 - .. Second year--\$53 (from \$26 to \$85)
 - .. Total demonstration--\$52 (from \$26 to \$85)
 - PHPs
 - .. First year--\$16 (from \$12 to \$30)
 - .. Second year--\$22 (from \$13 to \$34)
 - .. Total demonstration--\$18 (from \$13 to \$33)

The second exhibit in this group shows final data relating to costs, encounters, and costs per encounter by type of provider (across all facilities).

Cost per encounter

- Nonpsychiatric physician

.. First year--\$28 (from \$13 for AMHCs to \$33 for CMHCs)

.. Second year--\$12 (from \$12 for CMHCs to \$15 for AMHCs)

.. Total demonstration \$22 (from \$13 for AMHCs to \$24 for CMHCs)

- Psychiatrist

.. First year--\$42 (from \$28 for PHPs to \$63 for AMHCs)

.. Second year--\$52 (from \$38 for PHPs to \$67 for AMHCs)

.. Total demonstration--\$47 (from \$33 for PHPs to \$65 for AMHCs)

- QMHP psychologist

.. First year--\$71 (from \$15 for PHPs to \$76 for AMHCs)

.. Second year--\$74 (from \$17 for PHPs to \$76 for CMHCs)

.. Total demonstration--\$72 (from \$16 for PHPs to \$75 for CMHCs and AMHCs)

- QMHP psychiatric social worker

.. First year--\$50 (from \$31 for PHPs to \$59 for AMHCs)

.. Second year--\$61 (from \$41 for PHPs to \$62 for CMHCs)

.. Total demonstration--\$56 (from \$37 for PHPs to \$59 for AMHCs)

- QMHP psychiatric nurse

.. First year--\$42 (from \$16 for CMHCs to \$70 for AMHCs)

.. Second year--\$45 (from \$28 for CMHCs to \$71 for AMHCs)

.. Total demonstration--\$44 (from \$16 for PHPs to \$70 for AMHCs)

- Other psychologist
 - .. First year--\$56 (from \$30 for AMHCs to \$89 for CMHCs)
 - .. Second year--\$47 (from \$30 for AMHCs to \$70 for CMHCs)
 - .. Total demonstration--\$51 (from \$30 for AMHCs to \$79 for CMHCs)
- Other social worker
 - .. First year--\$39 (from \$36 for CMHCs to \$57 for AMHCs)
 - .. Second year--\$39 (from \$37 for CMHCs to \$46 for AMHCs and PHPs)
 - .. Total demonstration--\$39 (from \$37 for CMHCs to \$52 for AMHCs)
- Other nurse
 - .. First year--\$31 (from \$9 for PHPs to \$42 for CMHCs)
 - .. Second year--\$28 (from \$8 for PHPs to \$32 for CMHCs)
 - .. Total demonstration--\$29 (from \$9 for PHPs to \$37 for CMHCs)
- Counselor
 - .. First year--\$47 (from \$30 for AMHCs to \$87 for PHPs)
 - .. Second year--\$41 (from \$12 for PHPs to \$46 for CMHCs)
 - .. Total demonstration--\$44 (from \$18 for PHPs to \$49 for CMHCs)
- Recreation therapist
 - .. First year--\$69 (CMHCs only)
 - .. Second year--\$58 (CMHCs only)
 - .. Total demonstration--\$61 (CMHCs only)
- Expressive arts therapist
 - .. First year--\$18 (AMHCs only)
 - .. Second year--\$18 (AMHCs only)
 - .. Total demonstration--\$18 (AMHCs only)

- Other therapist
 - .. First year--\$30 (from \$23 for AMHCs to \$32 for CMHCs)
 - .. Second year--\$23 (from \$19 for AMHCs to \$25 for CMHCs)
 - .. Total demonstration--\$26 (from \$20 for AMHCs to \$28 for CMHCs)
- All staff
 - .. First year--\$44 (from \$16 for PHPs to \$50 for AMHCs)
 - .. Second year--\$49 (from \$22 for PHPs to \$53 for AMHCs)
 - .. Total demonstration--\$47 (from \$18 for PHPs to \$52 for AMHCs)

Of the 12 staffing categories reported, the average cost per encounter for all facility types increased for four categories between the first and second years of the demonstration, remained the same for two categories, and decreased for six categories. However, the four categories that increased in average cost per encounter (psychiatrist, psychologist, psychiatric social worker, and psychiatric nurse) were the most commonly utilized staff and accounted for 65 percent of the demonstration encounters. It is likely that the higher costs of psychologists and social workers compared to psychiatrists is due to the psychiatrists' costs being spread out over more beneficiaries, resulting in a lower cost per encounter for the psychiatrist. As a consequence, the cost per encounter rose 11 percent from the first to second year with the overall cost computed at \$47 per encounter.

Nine staffing categories were reported by all three types of facilities (CMHCs, AMHCs, and PHPs). Recreation therapists were reported only by CMHCs, expressive arts therapists by AMHCs only, and other therapists by CMHCs and AMHCs. Of the nine staff categories, PHPs reported the lowest average cost per encounter in 67 percent of the categories, AMHCs in 22 percent, and CMHCs in 11 percent. The highest average cost per encounter per staffing category was reported by CMHCs in 56 percent of the categories, 44 percent by AMHCs, and none by PHPs.

With respect to the analysis of partial hospitalization services, partial hospitalization hours for CMHCs were compared with the hours of service provided by PHPs. The following observations are made regarding service hours, costs, and costs per hour:

- . Overall partial hospitalization costs were \$8 per hour
- . PHPs provided 61 percent of the hours of partial hospitalization services (456,896 hours for PHPs, 291,763 hours for CMHCs) at a lower overall cost (\$2,547,227 for PHPs, \$3,532,987 for CMHCs), resulting in a lower cost per hour (\$6 for PHPs, \$12 for CMHCs).
- . There was relatively little variation in the cost per hour across time period in either the CMHCs or the PHPs, when all facilities were considered in the aggregate.
- . There was a wide variability in total demonstration costs per hour across facilities within each type: CMHCs ranged from \$5 per hour to \$21 per hour; PHPs ranged from \$2 per hour to \$30 per hour. There was also considerable variability within facilities.
- . Similar variability was found within each year of the demonstration. The average cost per hour for PHPs remained constant from year one to year two, whereas for CMHCs, it increased 28 percent.

(5) What Were The Costs Per Beneficiary Under The MMHD?

The first step in constructing costs per beneficiary for each facility or type of facility is to combine the costs associated with outpatient or ambulatory services and the costs associated with partial hospitalization (for CMHCs and PHPs). Exhibit 95 shows these data by facility by year. The data indicate that some 56 percent of the costs of the overall demonstration (for about 20 percent of the beneficiaries) were due to partial hospitalization services provided by CMHCs (58 percent) and PHPs (42 percent). Further, the data indicate that 43 percent of the costs were incurred in the first year of the demonstration, with the remaining 57 percent incurred during the second year.

Exhibit 96 combines these data and also includes the numbers of beneficiaries per facility thus enabling the calculation of costs per beneficiary. The exhibit shows the wide range in cost per beneficiary:

- . For CMHC-OP (\$143 to \$1,903)
- . For CMHC-PHP (\$841 to \$8,610)
- . For AMHC (\$408 to \$1,210)
- . For PHP (\$1,756 to \$6,775)

Exhibit 97 displays the average cost per beneficiary by the \$750 limit status of the facility. The \$750 limit CMHCs and AMHCs were, on the average, less costly for outpatient care than those not under the limit. However, when the cost of partial hospitalization is factored in (which was not subject to the limit in any facilities) the \$750 limit CMHCs become the most costly.

It must be noted that Exhibits 95, 96, and 97 are based on audited cost reports, and for the whole two-year demonstration period. However, not all of the reports were available at the time of this analysis. Thus, some data are incomplete as noted on the Exhibits.

(6) How Were Demonstration Facility Revenues Affected By The Demonstration?

A question arose during the demonstration as to how the demonstration affected participating facilities from an overall financial perspective. For example, did the increased availability of Medicare funds act to supplant or supplement other sources of facility revenue? To examine this question, each participating facility was asked to report its sources of revenue by year for 1979 to 1983. Overall, 10 CMHCs, 11 AMHCs, and 11 PHPs reported this information, but not necessarily for all five years.

Exhibit 98 shows the total and sources of revenue by year for each facility type. The exhibit shows that the total revenues for all types of facilities increased overall during the five-year period. The exhibit also shows the large increases in Medicare revenues during the demonstration

period, with a drop-off in 1983 reflecting the last quarter of the demonstration. Also of interest was the sharp decline in Federal funds, particularly for CMHCs, reflecting the termination of the Federal CMHC program and the advent of the ADM Services Block Grant. All other sources of revenue increased during the five-year period.

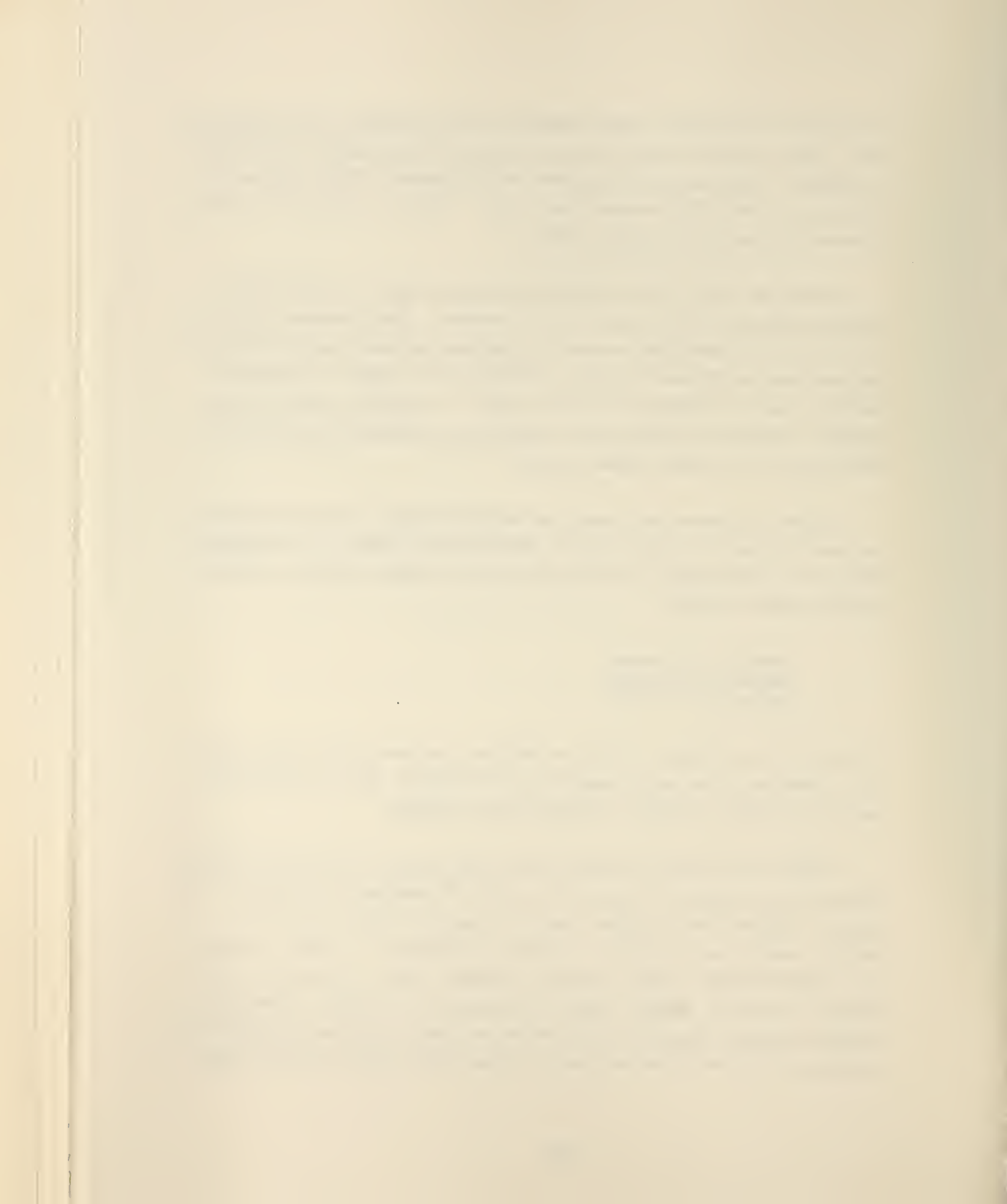
Exhibit 99 shows the annual percentage change in demonstration facility revenues by year and source of revenue. Most apparent from this exhibit was the percentage increase in Medicare revenues and the percentage decrease in Federal revenues, although the number of reporting facilities was not constant for all five years. In general, the total percentage increases in revenue were within the consumer price index for health care for the same period of time.

Exhibit 100 shows the annual percentage change in total and Medicare revenues by year for each type of demonstration facility. The Medicare revenues as percentage of total demonstration facility revenues increased through 1982 as follows:

- . CMHCs--4.8 percent
- . AMHCs--5.0 percent
- . PHPs--13.0 percent

Although the percentage change in Medicare revenues from year-to-year was substantial, the above data show that Medicare did not account for much of the total revenues of demonstration facilities.

Exhibit 101 shows the annual percentage change in total and Medicare revenues per facility by year for each type of demonstration facility. The exhibit confirms the findings shown in Exhibit 99 that, even on a facility-specific basis, Medicare revenues increased at a faster rate than total demonstration facility revenues (through 1982). However, these Medicare revenues merely offset the decreases in Federal categorical funding and may even have constrained the rate of increase in State/local funding. This would be the case in States which finance mental health



services on a "deficit" basis, i.e., there would be a dollar loss of State/local funds for every dollar again in third-party, client fee, or other sources of revenue.

In summary, the data in these four exhibits show that although the demonstration facilities took advantage of the financial incentives of the demonstration, they did not abuse the incentives. During the baseline period, thousands of Medicare beneficiaries were served by demonstration facilities, supported by Federal categorical and State and local grant-in-aid funds. During the demonstration period, Medicare reimbursed these facilities on a cost-related basis for most of the care provided Medicare beneficiaries in these facilities. At the same time, the availability of Federal categorical mental health funds was eliminated and State and local sources of revenue for mental health were constrained. Thus, the demonstration may have permitted the demonstration facilities to continue to serve beneficiaries admitted during the baseline period, and to serve beneficiaries in the demonstration period.

HHS, Office of the Secretary

CHARGES TO MEDICARE BY FACILITY TYPE, BY
LIMIT/NO LIMIT--BASELINE AND DEMONSTRATION
CHARGES PER ENCOUNTER
AMBULATORY SERVICES ONLY

| | BASELINE PERIOD | | | | DEMONSTRATION PERIOD | | | |
|-------------------------------|-----------------|-------------|-------------|------------|----------------------|-------------|-------------|------------|
| | <u>ALL</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> | <u>ALL</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> |
| <u>All Facilities</u> | | | | | | | | |
| Total Charges* | \$245,689 | \$201,032 | \$39,952 | \$4,705 | \$3,893,907 | \$1,835,984 | \$1,524,050 | \$533,873 |
| Number of Encounters | 8,638 | 6,553 | 1,784 | 301 | 132,556 | 69,548 | 50,277 | 12,731 |
| Charges Per Encounter | \$28.44 | \$30.68 | \$22.39 | \$15.63 | \$29.38 | \$26.40 | \$30.31 | \$41.93 |
| <u>\$750 Limit Facilities</u> | | | | | | | | |
| Total Charges* | \$153,104 | \$140,184 | \$12,920 | -- | \$2,023,780 | \$1,069,058 | \$954,722 | -- |
| Number of Encounters | 5,040 | 4,468 | 572 | -- | 66,429 | 37,524 | 28,905 | -- |
| Charges Per Encounter | \$30.38 | \$31.38 | \$22.59 | -- | \$30.47 | \$28.49 | \$33.03 | -- |
| <u>No Limit Facilities</u> | | | | | | | | |
| Total Charges* | \$92,585 | \$60,848 | \$27,031 | \$4,705 | \$1,870,127 | \$766,926 | \$569,328 | \$533,873 |
| Number of Encounters | 3,598 | 2,085 | 1,212 | 301 | 66,127 | 32,024 | 21,372 | 12,731 |
| Charges Per Encounter | \$25.73 | \$29.18 | \$22.30 | \$15.63 | \$28.28 | \$23.95 | \$26.64 | \$41.93 |

* NOTE: This table includes only the records of services that included both charges and encounters.

EXHIBIT 86

HHS, Office of the Secretary

CHARGES TO MEDICARE BY AMBULATORY SERVICE TYPE,
BY FACILITY TYPE--BASELINE AND DEMONSTRATION
CHARGES PER ENCOUNTER, AMBULATORY SERVICES ONLY

| Service Type | -----Baseline Period----- | | | | -----Demonstration Period----- | | | |
|------------------------------------|-------------------------------|----------------------------|-------------------------------|----------------------------|--------------------------------|----------------------------|-------------------------------|----------------------------|
| | CMHC Charges/ Encounter | CMHC Number of Cases | AMHC Charges/ Encounter | AMHC Number of Cases | CMHC Charges/ Encounter | CMHC Number of Cases | AMHC Charges/ Encounter | AMHC Number of Cases |
| Individual Therapy | \$35.31 | 1,794 | \$25.69 | 484 | \$32.39 | 15,681 | \$32.01 | 20,602 |
| Group Therapy | 28.99 | 301 | 13.40 | 50 | 22.63 | 11,169 | 31.14 | 3,017 |
| Medication Therapy | 24.14 | 1,178 | 19.25 | 103 | 18.80 | 4,715 | 11.54 | 1,503 |
| Other Mental Health Services | 36.68 | 188 | 24.23 | 13 | 41.02 | 2,094 | 34.75 | 1,057 |
| Other Therapeutic Services | 24.93 | 500 | 21.40 | 5 | 27.59 | 40 | 40.05 | 232 |
| Other Diagnostic Services | 15.07 | 191 | 13.00 | 1 | 29.21 | 378 | 45.83 | 12 |
| Psychosocial History-Intake | 39.67 | 174 | 29.73 | 45 | 41.95 | 1,524 | 42.74 | 1,566 |
| Psychiatric- Psychological Exam | 42.06 | 234 | 22.45 | 947 | 29.42 | 1,642 | 30.22 | 2,594 |
| Other | 20.99 | 167 | 62.00 | 3 | 18.20 | 10,081 | 14.44 | 2,880 |

EXHIBIT 87

HHS, Office of the Secretary

CHARGES TO MEDICARE BY TYPE OF PERSONNEL, TYPE,
BY FACILITY TYPE--BASELINE AND DEMONSTRATION
CHARGES PER ENCOUNTER, AMBULATORY SERVICES ONLY

| Personnel Type | CMHC | | | Baseline Period | | | PHIP | | | CMHC | | | Demonstration Period | | | PHIP | |
|----------------------------------|-----------------------|--------------------|--|-----------------------|--------------------|--|-----------------------|--------------------|--|-----------------------|--------------------|--|-----------------------|--------------------|--|-----------------------|--------------------|
| | Charges/ Encounter | Number of Cases | | Charges/ Encounter | Number of Cases | | Charges/ Encounter | Number of Cases | | Charges/ Encounter | Number of Cases | | Charges/ Encounter | Number of Cases | | Charges/ Encounter | Number of Cases |
| Psychiatrist | \$28.29 | 1,612 | | \$22.68 | 1,265 | | \$25.16 | 47 | | \$23.37 | 19,537 | | \$29.85 | 7,096 | | \$50.41 | 883 |
| Nonpsychiatric Physician | 34.89 | 9 | | -- | -- | | 31.33 | 5 | | 19.70 | 1,058 | | 10.73 | 141 | | 119.48 | 23 |
| QMHP Psychologist | 37.47 | 289 | | 40.22 | 58 | | 37.50 | 2 | | 40.59 | 951 | | 27.58 | 2,138 | | 46.07 | 555 |
| Other Psychologist | 42.44 | 9 | | 26.32 | 31 | | 30.00 | 1 | | 33.90 | 1,263 | | 22.40 | 1,495 | | -- | -- |
| Psychiatric Nurse | 41.67 | 117 | | 6.00 | 2 | | -- | -- | | 23.15 | 508 | | 40.77 | 175 | | 36.05 | 48 |
| Other Nurse | 29.76 | 660 | | 16.86 | 105 | | 17.54 | 30 | | 18.41 | 4,068 | | 12.41 | 4,878 | | 26.26 | 523 |
| Psychiatric Social Worker | 38.36 | 543 | | 23.60 | 124 | | 12.17 | 100 | | 30.38 | 9,067 | | 36.54 | 16,261 | | 34.60 | 292 |
| Other Social Worker | 28.26 | 208 | | 28.81 | 42 | | 23.13 | 8 | | 27.86 | 3,418 | | 27.09 | 549 | | 17.38 | 28 |
| Counselor | 32.34 | 132 | | 20.48 | 21 | | 10.52 | 25 | | 28.33 | 5,949 | | 25.88 | 1,023 | | 31.29 | 177 |
| Recreation Therapist | 15.00 | 3 | | -- | -- | | 8.93 | 347 | | 35.83 | 241 | | -- | -- | | -- | -- |
| Expressive Arts Therapist | -- | -- | | -- | -- | | -- | -- | | -- | -- | | 40.05 | 232 | | -- | -- |
| Other Mental Health Personnel | 26.65 | 824 | | -- | -- | | -- | -- | | 33.05 | 1,744 | | 20.20 | 640 | | 31.99 | 236 |

EXHIBIT 88

HHS, Office of the Secretary

CHARGES TO MEDICARE BY FACILITY TYPE--
BASELINE AND DEMONSTRATION,
CHARGES PER HOUR
PARTIAL HOSPITALIZATION SERVICES ONLY

| <u>All Facilities</u> | <u>-----Baseline Period-----</u> | | | <u>-----Demonstration Period-----</u> | | |
|-----------------------|----------------------------------|----------------|------------|---------------------------------------|----------------|-------------|
| | <u>All</u> | <u>CMHC-PH</u> | <u>PHP</u> | <u>All</u> | <u>CMHC-PH</u> | <u>PHP</u> |
| Total Charges | \$40,668 | \$21,398 | \$19,270 | \$5,015,171 | \$2,765,645 | \$2,249,526 |
| Number of Hours | 5,059 | 2,173 | 2,886 | 838,616 | 320,069 | 518,547 |
| Charges Per Hour | \$8.04 | \$9.85 | \$6.68 | \$5.98 | \$8.64 | \$4.34 |

NOTE: This table includes only the records of services that included both charges and hours.



EXHIBIT 89

HHS, Office of the Secretary

ANNUAL MEDICARE CHARGES PER BENEFICIARY ^{1/} BY
FACILITY TYPE, BY LIMIT STATUS, BY BENEFICIARY
AGE, BY PREVIOUS MENTAL HEALTH TREATMENT
STATUS--BASELINE AND DEMONSTRATION

| Limit Status/Beneficiary Age/ Previous Treatment Status | BASELINE PERIOD (One Year Prior to 4/15/81) | | | | | DEMONSTRATION PERIOD (One Year Subsequent to 4/15/81) | | | | |
|--|---|-------|------|-------|------|---|-------|-------|-------|-------|
| | CMHC | | AMHC | | PIHP | CMHC | | AMHC | | PIHP |
| | N | Mean | N | Mean | | N | Mean | N | Mean | N |
| <u>\$750 Limit</u> ^{2/} | | | | | | | | | | |
| Under Age 65 | 426 | \$648 | 124 | \$190 | -- | 1,666 | \$753 | 1,469 | \$286 | -- |
| Age 65 and Over | 231 | 605 | 67 | 225 | -- | 893 | 823 | 411 | 299 | -- |
| No Previous Mental Health Treatment | 195 | 698 | 57 | 149 | -- | 773 | 672 | 1,058 | 281 | -- |
| Some Previous Mental Health Treatment | 228 | 632 | 92 | 177 | -- | 1,019 | 897 | 626 | 251 | -- |
| | 61 | 555 | 26 | 257 | -- | 324 | 472 | 681 | 333 | -- |
| <u>No Limit</u> | | | | | | | | | | |
| Under Age 65 | 162 | \$219 | 154 | \$114 | 54 | 1,495 | \$308 | 704 | \$256 | 662 |
| Age 65 and Over | 68 | 314 | 96 | 104 | 39 | 881 | 332 | 351 | 180 | 518 |
| No Previous Mental Health Treatment | 94 | 150 | 58 | 129 | 15 | 614 | 274 | 353 | 332 | 144 |
| Some Previous Mental Health Treatment | 74 | 282 | 115 | 107 | 40 | 987 | 311 | 457 | 185 | 537 |
| | 16 | 273 | 37 | 130 | 3 | 385 | 304 | 196 | 288 | 78 |
| | | | | | | | | | | 2,701 |

^{1/} Per beneficiary charges computed for all beneficiaries with a Medicare charge greater than 0 over the one-year period prior to the start of the demonstration (4/15/81) and over the one-year period subsequent to the start of the demonstration.

^{2/} Diagnostic services and partial hospitalization services in CMHCs and PIHPs were not applied to the \$750 limit.

EXHIBIT 90

HHS, Office of the Secretary

MEDICARE CHARGES PER BENEFICIARY ^{1/} BY
FACILITY TYPE, BY LIMIT STATUS, BY BENEFICIARY
AGE, BY PREVIOUS MENTAL HEALTH TREATMENT
STATUS--BASELINE AND DEMONSTRATION

| Limit Status/Beneficiary Age/ Previous Treatment Status | BASELINE PERIOD (Two Years Prior to 4/15/81) | | | | | | DEMONSTRATION PERIOD (Two Years Subsequent to 4/15/81) | | | | | |
|--|--|-------|-----|-------|----|------|--|---------|-------|-------|-----|-------|
| | CMHC | | | AMHC | | | CMHC | | | AMHC | | |
| | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean | N | Mean |
| <u>\$750 Limit</u> ^{2/} | | | | | | | | | | | | |
| Under Age 65 | 494 | \$857 | 139 | \$206 | -- | -- | 2,102 | \$1,497 | 2,033 | \$402 | -- | -- |
| Age 65 and Over | 256 | 882 | 70 | 241 | -- | -- | 1,124 | 1,665 | 538 | 412 | -- | -- |
| No Previous Mental Health Treatment | 238 | 829 | 139 | 206 | -- | -- | 978 | 1,305 | 1,495 | 398 | -- | -- |
| Some Previous Mental Health Treatment | 254 | 955 | 70 | 241 | -- | -- | 1,239 | 1,785 | 722 | 388 | -- | -- |
| | 70 | 776 | 69 | 170 | -- | -- | 465 | 866 | 813 | 488 | -- | -- |
| <u>No Limit</u> | | | | | | | | | | | | |
| Under Age 65 | 300 | 201 | 169 | 159 | 58 | 337 | 1,886 | 616 | 950 | 647 | 780 | 3,407 |
| Age 65 and Over | 100 | 347 | 103 | 161 | 41 | 395 | 1,106 | 673 | 467 | 575 | 614 | 3,164 |
| No Previous Mental Health Treatment | 200 | 128 | 66 | 157 | 17 | 196 | 780 | 535 | 483 | 717 | 166 | 4,304 |
| Some Previous Mental Health Treatment | 94 | 368 | 124 | 163 | 44 | 263 | 1,213 | 638 | 707 | 462 | 620 | 2,729 |
| | 27 | 218 | 43 | 151 | 3 | 468 | 493 | 500 | 469 | 544 | 89 | 5,768 |

^{1/} Per beneficiary charges computed for all beneficiaries with a Medicare charge greater than 0 over the two-year period prior to the start of the demonstration (4/15/81) and over the two-year period subsequent to the start of the demonstration.

^{2/} Diagnostic services and partial hospitalization services in CMHCs and PHPs were not applied to the \$750 limit.

EXHIBIT 91

HHS, Office of the Secretary
DISTRIBUTION OF ANNUAL CHARGES
TO MEDICARE, BY CHARGE LIMIT AND
FACILITY TYPE

| Amount of Charges | All Facilities | Facilities With \$750 Charge Limit | | | | Facilities With No Annual Charge Limit | | | | |
|-------------------|----------------|------------------------------------|---------|-------|-------|--|-------|-------|------|-----|
| | | Total Limited Facilities | | CMHC | AMHC | Total Unlimited Facilities | | CMHC | AMHC | PHP |
| | | NUMBER OF CASES | PERCENT | | | | | | | |
| NUMBER OF CASES | 7,298 | 4,010 | 2,025 | 1,985 | 3,288 | 1,691 | 905 | 692 | | |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | |
| \$0 - \$250 | 55.4 | 55.9 | 47.4 | 64.5 | 54.7 | 66.6 | 59.7 | 19.2 | | |
| \$251- \$500 | 16.9 | 17.4 | 15.8 | 19.0 | 16.4 | 17.0 | 19.1 | 11.1 | | |
| \$501 - \$750 | 7.5 | 8.0 | 8.4 | 7.5 | 6.8 | 6.2 | 5.1 | 10.7 | | |
| \$751 - \$1,000 | 4.5 | 5.0 | 5.3 | 4.8 | 3.9 | 2.3 | 5.5 | 5.8 | | |
| \$1,001 - \$1,250 | 3.0 | 2.9 | 3.1 | 2.8 | 3.1 | 1.7 | 3.6 | 5.8 | | |
| \$1,251 - \$1,500 | 2.3 | 2.2 | 3.3 | 1.1 | 2.4 | 0.9 | 2.5 | 5.9 | | |
| \$1,501 - \$1,750 | 1.4 | 1.3 | 2.4 | 0.2 | 1.6 | 1.0 | 0.8 | 4.0 | | |
| \$1,751 - \$2,000 | 1.3 | 0.9 | 1.8 | -- | 1.9 | 0.9 | 1.9 | 4.3 | | |
| \$2,001 - \$2,250 | 0.9 | 0.7 | 1.4 | -- | 1.2 | 0.2 | 0.8 | 3.9 | | |
| \$2,251 - \$2,500 | 0.7 | 0.4 | 0.8 | -- | 1.2 | 0.5 | 0.2 | 3.9 | | |
| \$2,501 + | 6.0 | 5.3 | 10.3 | 0.2 | 6.9 | 2.7 | 0.8 | 25.3 | | |

EXHIBIT 91(2)

HHS, Office of the Secretary

CHARGES TO MEDICARE BY LIMIT AND
NO LIMIT FACILITIES--CHARGES FOR
AMBULATORY SERVICES ONLY BY AGE GROUP

| Amount of Charges | Number of Cases | Facilities With \$750 Charge Limit | | | | Facilities With No Charge Limit | | | |
|----------------------|-----------------|------------------------------------|--------------------|-----------------------|--------------------|---------------------------------|--------------------|-----------------------|--------------------|
| | | Beneficiaries | | Beneficiaries | | Beneficiaries | | Beneficiaries | |
| | | Under 65 Years of Age | 65 Years and Older | Under 65 Years of Age | 65 Years and Older | Under 65 Years of Age | 65 Years and Older | Under 65 Years of Age | 65 Years and Older |
| | | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| | Number of Cases | 1,544 | | 2,158 | | 1,980 | | 1,236 | |
| | Percent | | 100.0% | | 100.0% | | 100.0% | | 100.0% |
| \$0 - 250 | | 752 | 48.7 | 1,306 | 60.5 | 1,037 | 52.4 | 717 | 58.8 |
| 251 - 500 | | 284 | 18.4 | 343 | 15.9 | 312 | 15.7 | 219 | 17.7 |
| 501 - 750 | | 141 | 9.1 | 152 | 7.0 | 138 | 7.0 | 81 | 6.6 |
| 751 - 1,000 | | 88 | 5.7 | 107 | 5.0 | 74 | 3.7 | 52 | 4.2 |
| 1,001 - 1,250 | | 46 | 3.0 | 63 | 2.9 | 57 | 2.9 | 43 | 3.5 |
| 1,251 - 1,500 | | 38 | 2.5 | 47 | 2.2 | 53 | 2.7 | 24 | 1.9 |
| 1,501 - 1,750 | | 27 | 1.7 | 24 | 1.1 | 36 | 1.8 | 15 | 1.2 |
| 1,751 - 2,000 | | 17 | 1.1 | 19 | 0.8 | 43 | 2.2 | 18 | 1.5 |
| 2,001 - 2,250 | | 16 | 1.0 | 12 | 0.6 | 30 | 1.5 | 8 | 0.6 |
| 2,251 - 2,500 | | 6 | 0.4 | 10 | 0.5 | 32 | 1.6 | 6 | 0.5 |
| 2,501 + | | 129 | 8.4 | 75 | 3.5 | 168 | 8.5 | 53 | 4.3 |

EXHIBIT 92(1)

HHS, Office of the Secretary

DEMONSTRATION COST PER ENCOUNTERS BY FACILITY

| Facilities | FIRST YEAR | | | SECOND YEAR | | | TOTAL DEMONSTRATION | | |
|--------------------------|---------------------|--------------------------|----------------|---------------------|--------------------------|----------------|---------------------|--------------------------|----------------|
| | Demonstration Costs | Demonstration Encounters | Cost/Encounter | Demonstration Costs | Demonstration Encounters | Cost/Encounter | Demonstration Costs | Demonstration Encounters | Cost/Encounter |
| CMHC | | | | | | | | | |
| Ambulatory Care | | | | | | | | | |
| 1 | \$ 48,689 | 950 | \$51.25 | \$ 10,551* | 223* | \$47.31 | \$ 59,240* | 1,173* | \$50.50 |
| 2 | 93,531 | 2,101 | 44.52 | 131,057 | 2,504 | 52.34 | 224,588 | 4,605 | 48.77 |
| 3 | 117,194 | 1,166 | 100.51 | 133,992 | 1,371 | 97.73 | 251,186 | 2,537 | 99.01 |
| 4 | 38,535 | 558 | 69.06 | -- | -- | -- | 38,535* | 558* | 69.06 |
| 5 | 16,894 | 266 | 63.51 | 28,598 | 326 | 87.72 | 45,492 | 592 | 76.84 |
| 6 | 84,297 | 4,947 | 17.04 | 104,533* | 2,872* | 36.40 | 188,830* | 7,819* | 24.15 |
| 7 Data Not Available | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 8 | 45,165 | 847 | 53.32 | 47,015 | 781 | 60.20 | 92,180 | 1,628 | 56.62 |
| 9 | 331,450 | 9,713 | 34.12 | 325,946 | 9,235 | 35.29 | 657,396 | 18,948 | 34.69 |
| 10 | 20,852 | 341 | 61.15 | 67,917 | 939 | 72.33 | 88,769 | 1,280 | 69.35 |
| 11 | 160,862 | 3,023 | 53.21 | 222,810 | 4,178 | 53.33 | 383,672 | 7,201 | 53.28 |
| 12 | 96,433 | 1,823 | 52.90 | 103,885 | 1,889 | 54.99 | 200,318 | 3,712 | 53.96 |
| 13 | 19,631 | 668 | 29.39 | 62,196 | 1,424 | 43.68 | 81,827 | 2,092 | 39.11 |
| 14 | 35,998 | 1,023 | 35.19 | 127,650 | 3,607 | 35.39 | 163,648 | 4,630 | 35.34 |
| 15 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total CMHC | 1,109,531 | 27,426 | 40.56 | 1,366,150 | 29,349 | 46.55 | 2,475,681 | 56,775 | 43.61 |
| Ambulatory Clinics | | | | | | | | | |
| 16 | 17,076 | 574 | 29.75 | 39,495 | 928 | 42.56 | 56,571 | 1,502 | 37.66 |
| 17 | 136,821 | 2,309 | 59.26 | 136,676 | 2,120 | 64.47 | 273,497 | 4,429 | 61.75 |
| 18 | 86,520 | 3,384 | 25.57 | 124,289 | 4,818 | 25.80 | 210,809 | 8,202 | 25.70 |
| 19 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 20 | 23,753 | 346 | 68.65 | 41,493 | 596 | 69.62 | 65,246 | 942 | 69.26 |
| 21 | 37,779 | 617 | 61.23 | 75,764 | 1,231 | 61.55 | 113,543 | 1,848 | 61.44 |
| 22 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 23 | 108,769 | 2,540 | 42.82 | 178,086 | 4,155 | 42.86 | 286,855 | 6,695 | 42.85 |
| 24 | 50,425 | 1,240 | 40.67 | 45,974 | 1,091 | 42.14 | 96,399 | 2,331 | 41.36 |
| 25 | 56,521 | 1,366 | 41.38 | 53,247 | 1,526 | 34.89 | 109,768 | 2,892 | 37.96 |
| 26 | 37,394* | 798* | 46.86 | -- | -- | -- | 37,394* | 798* | 46.86 |
| 27 | 266,269 | 3,139 | 84.83 | 452,917 | 5,321 | 85.12 | 719,186 | 8,460 | 85.01 |
| 28 | 90,425 | 2,024 | 44.68 | 105,638 | 2,286 | 46.21 | 196,063 | 4,310 | 45.49 |
| 29 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 30 | 39,435 | 648 | 60.86 | 69,308 | 1,087 | 63.76 | 108,743 | 1,735 | 62.68 |
| Total Ambulatory Clinics | 951,187 | 18,985 | 50.10 | 1,322,887 | 25,159 | 52.58 | 2,274,074 | 44,144 | 51.51 |

* Data not complete for facility.

EXHIBIT 92(2)

| Facilities | FIRST YEAR | | | SECOND YEAR | | | TOTAL DEMONSTRATION | | |
|--|---------------------|--------------------------|----------------|---------------------|--------------------------|----------------|---------------------|--------------------------|----------------|
| | Demonstration Costs | Demonstration Encounters | Cost/Encounter | Demonstration Costs | Demonstration Encounters | Cost/Encounter | Demonstration Costs | Demonstration Encounters | Cost/Encounter |
| Partial Hospitalization Programs (PHP) | | | | | | | | | |
| 31 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 32 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 33 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 34 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 35 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 36 | \$ 2,255 | 154 | \$14.64 | \$ 291 | 22 | \$13.23 | \$ 2,546 | 176 | \$14.47 |
| 37 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 38 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 39 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 40 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 41 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 42 | 1,924 | 154 | 12.49 | 1,459 | 110 | 13.26 | 3,383 | 264 | 12.81 |
| 43 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 44 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 45 | 1,635 | 54 | 30.28 | 3,164 | 92 | 34.39 | 4,799 | 146 | 32.87 |
| Total PHP | 5,814 | 362 | 16.06 | 4,914 | 224 | 21.94 | 10,728 | 586 | 18.31 |
| GRAND TOTAL | \$2,066,532 | 46,773 | \$44.18 | \$2,693,951 | 54,732 | \$49.22 | \$4,760,483 | 101,505 | \$46.90 |

EXHIBIT 93(1)

HHS, Office of the Secretary

COSTS PER AMBULATORY SERVICE ENCOUNTER BY TYPE
OF PROVIDER AND TYPE OF FACILITY

| Type of Provider and Facility | First Year | | | Second Year | | | Total Demonstration | | |
|----------------------------------|------------|-------------------------|--------------------|-------------|-------------------------|--------------------|---------------------|-------------------------|--------------------|
| | Cost | Number of Encounters | Cost/ Encounter | Cost | Number of Encounters | Cost/ Encounter | Cost | Number of Encounters | Cost/ Encounter |
| Non-Psychiatric Physician | | | | | | | | | |
| CMHC | \$13,588 | 405 | \$ 33.55 | \$ 3,792 | 328 | \$ 11.56 | \$ 17,380 | 733 | \$ 23.71 |
| AMHC | 1,724 | 135 | 12.77 | 408 | 27 | 15.11 | 2,132 | 162 | 13.16 |
| PIIP | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Grand Total | \$15,312 | 540 | \$ 28.36 | \$ 4,200 | 355 | \$ 11.83 | \$ 19,512 | 895 | \$ 21.80 |
| Psychiatrist | | | | | | | | | |
| CMHC | \$349,231 | 10,272 | \$ 34.00 | \$ 468,133 | 10,603 | \$ 44.15 | \$ 817,364 | 20,875 | \$ 39.16 |
| AMHC | 250,056 | 3,980 | 62.83 | 365,074 | 5,487 | 66.53 | 615,130 | 9,467 | 64.98 |
| PIIP | 1,884 | 67 | 28.12 | 2,519 | 67 | 37.60 | 4,403 | 134 | 32.86 |
| Grand Total | \$601,171 | 14,319 | \$ 41.98 | \$ 835,726 | 16,157 | \$ 51.72 | \$1,436,897 | 30,476 | \$ 47.15 |
| Psychologist | | | | | | | | | |
| CMHC | \$ 36,222 | 488 | \$ 74.23 | \$ 52,627 | 689 | \$ 76.38 | \$ 88,849 | 1,177 | \$ 75.49 |
| AMHC | 107,171 | 1,418 | 75.58 | 110,017 | 1,488 | 73.94 | 217,188 | 2,906 | 74.74 |
| PIIP | 2,391 | 156 | 15.33 | 411 | 24 | 17.13 | 2,802 | 180 | 15.57 |
| Grand Total | \$145,784 | \$2,062 | \$ 70.70 | \$ 163,055 | 2,201 | \$ 74.08 | \$ 308,839 | 4,263 | \$ 72.45 |
| Psychiatric Social Worker | | | | | | | | | |
| CMHC | \$291,458 | \$7,147 | \$ 40.78 | \$ 371,177 | \$5,940 | \$ 62.49 | \$ 662,635 | 13,087 | \$ 50.63 |
| AMHC | 401,713 | 6,843 | 58.70 | 633,841 | 10,464 | 60.57 | 1,035,554 | 17,307 | 59.83 |
| PIIP | 92 | 3 | 30.67 | 165 | 4 | 41.25 | 257 | 7 | 36.71 |
| Grand Total | \$693,263 | \$13,993 | \$ 49.54 | \$1,005,183 | \$16,408 | \$ 61.26 | \$1,698,446 | 30,401 | \$ 55.87 |
| Psychiatric Nurse | | | | | | | | | |
| CMHC | \$10,772 | \$ 390 | \$ 27.62 | \$ 9,277 | \$ 332 | \$ 27.94 | \$ 20,049 | 722 | \$ 27.77 |
| AMHC | 14,710 | 210 | 70.05 | 16,328 | 231 | 70.68 | 31,038 | 441 | 70.38 |
| PIIP | 16 | 1 | 16.00 | -- | -- | -- | 16 | 1 | 16 |
| Grand Total | \$25,498 | \$ 601 | \$ 42.43 | \$ 25,605 | \$ 563 | \$ 45.48 | \$ 51,103 | 1,164 | \$ 43.90 |
| Other Psychologist | | | | | | | | | |
| CMHC | \$61,102 | \$ 687 | \$ 88.94 | \$ 58,081 | \$ 825 | \$ 70.40 | \$ 119,183 | 1,512 | \$ 78.82 |
| AMHC | 25,190 | 841 | 29.95 | 35,705 | 1,180 | 30.26 | 60,895 | 2,021 | 30.13 |
| PIIP | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Grand Total | \$86,292 | \$1,528 | \$ 56.47 | \$ 93,786 | \$ 2,005 | \$ 46.78 | \$ 180,078 | 3,533 | \$ 50.97 |

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EXHIBIT 93(2)

| Type of Provider and Facility | First Year | | | Second Year | | | Total Demonstration | | |
|-------------------------------|-------------|----------------------|----------------|-------------|----------------------|----------------|---------------------|----------------------|----------------|
| | Cost | Number of Encounters | Cost/Encounter | Cost | Number or Encounters | Cost/Encounter | Cost | Number of Encounters | Cost/Encounter |
| Other Social Workers | | | | | | | | | |
| CMHC | \$ 69,930 | 1,949 | \$35.88 | \$ 73,395 | 1,972 | \$37.22 | \$143,325 | 3,921 | \$36.55 |
| AMHC | 19,756 | 348 | 56.77 | 14,534 | 314 | 46.29 | 34,290 | 662 | 51.80 |
| P.H.P. | 247 | 6 | 41.17 | 835 | 18 | 46.39 | 1,082 | 24 | 45.08 |
| Grand Total | 89,933 | 2,303 | 39.05 | 88,764 | 2,304 | 38.53 | 178,697 | 4,607 | 38.79 |
| Other Nurses | | | | | | | | | |
| CMHC | 96,770 | 2,297 | 42.13 | 96,515 | 2,974 | 32.45 | 193,285 | 5,271 | 36.67 |
| AMHC | 89,671 | 3,559 | 25.20 | 99,900 | 3,997 | 24.99 | 189,571 | 7,556 | 25.09 |
| P.H.P. | 1,097 | 128 | 8.57 | 836 | 99 | 8.44 | 1,933 | 227 | 8.52 |
| Grand Total | 187,538 | 5,984 | 31.34 | 197,251 | 7,070 | 27.90 | 384,789 | 13,054 | 29.48 |
| Counselors | | | | | | | | | |
| CMHC | 139,987 | 2,641 | 53.01 | 180,658 | 3,925 | 46.03 | 320,645 | 6,566 | 48.83 |
| AMHC | 25,174 | 842 | 29.90 | 33,223 | 1,225 | 27.12 | 58,397 | 2,067 | 28.25 |
| P.H.P. | 87 | 1 | 87.00 | 148 | 12 | 12.33 | 235 | 13 | 18.08 |
| Grand Total | 165,248 | 3,484 | 47.43 | 214,029 | 5,162 | 41.46 | 379,277 | 8,646 | 43.87 |
| Recreation Therapist | | | | | | | | | |
| CMHC | 7,038 | 102 | 69.00 | 13,799 | 239 | 57.74 | 20,837 | 341 | 61.11 |
| AMHC | | | | | | | | | |
| P.H.P. | 7,038 | 102 | 69.00 | 13,799 | 239 | 57.74 | 20,837 | 341 | 61.11 |
| Grand Total | | | | | | | | | |
| Expressive Arts Therapist | | | | | | | | | |
| CMHC | 8,756 | 487 | 17.98 | 2,349 | 131 | 17.93 | 11,105 | 618 | 17.97 |
| AMHC | | | | | | | | | |
| P.H.P. | 8,756 | 487 | 17.98 | 2,349 | 131 | 17.93 | 11,105 | 618 | 17.97 |
| Grand Total | | | | | | | | | |
| Other Therapist | | | | | | | | | |
| CMHC | 33,433 | 1,048 | 31.90 | 38,696 | 1,522 | 25.42 | 72,129 | 2,570 | 28.07 |
| AMHC | 7,266 | 322 | 22.57 | 11,508 | 615 | 18.71 | 18,774 | 937 | 20.04 |
| P.H.P. | | | | | | | | | |
| Grand Total | 40,699 | 1,370 | 29.71 | 50,204 | 2,137 | 23.49 | 90,903 | 3,507 | 25.92 |
| All Staff | | | | | | | | | |
| CMHS | 1,109,531 | 27,426 | 40.46 | 1,366,150 | 29,349 | 46.55 | 2,475,681 | 56,775 | 43.61 |
| AMHC | 951,187 | 18,985 | 50.10 | 1,322,887 | 25,159 | 52.58 | 2,274,074 | 44,144 | 51.51 |
| P.H.P. | 5,814 | 362 | 16.06 | 4,914 | 224 | 21.94 | 10,728 | 586 | 18.31 |
| Grand Total | \$2,066,532 | 46,773 | \$44.18 | \$2,693,951 | 54,732 | \$49.22 | \$4,760,483 | 101,505 | \$46.90 |

EXHIBIT 94

IHHS, Office of the Secretary

DEMONSTRATION PARTIAL HOSPITALIZATION COSTS,
HOURS OF CARE, AND COST PER HOUR BY FACILITY

| Facilities | FIRST YEAR | | | SECOND YEAR | | | TOTAL DEMONSTRATION | | |
|---|---------------------|---------------|-----------|---------------------|---------------|-----------|---------------------|---------------|-----------|
| | Demonstration Costs | Hours of Care | Cost/Hour | Demonstration Costs | Hours of Care | Cost/Hour | Demonstration Costs | Hours of Care | Cost/Hour |
| CMHC | | | | | | | | | |
| Partial Hospitalization | | | | | | | | | |
| 1 | \$123,341 | 24,494 | \$ 5.04 | \$ 25,287* | 4,901* | \$ 5.16 | \$148,628* | 29,395* | \$ 5.06 |
| 2 | 121,206 | 8,750 | 13.85 | 139,027 | 9,864 | 14.09 | 260,233 | 18,614 | 13.98 |
| 3 | 77,716 | 3,389 | 22.93 | 116,154 | 6,758 | 17.19 | 193,870 | 10,147 | 19.11 |
| 4 Data not available | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 5 | 318,015 | 19,756 | 16.10 | 383,076 | 20,409 | 18.77 | 701,091 | 40,165 | 17.46 |
| 6 | 91,793 | 8,142 | 11.27 | 110,213* | 8,118* | 13.58 | 202,006* | 16,260* | 12.42 |
| 7 Data not available | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 31,944 | 6,644 | 4.81 | 45,255 | 7,456 | 6.07 | 77,199 | 14,100 | 5.48 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 17,258 | 2,881 | 5.99 | 21,429 | 4,689 | 4.57 | 38,687 | 7,570 | 5.11 |
| 12 | 544,305 | 56,919 | 9.56 | 675,782 | 59,545 | 11.35 | 1,220,087 | 116,464 | 10.48 |
| 13 | 73,777 | 3,813 | 19.35 | 244,800 | 11,517 | 21.26 | 318,577 | 15,330 | 20.78 |
| 14 | 81,478 | 5,186 | 15.71 | 291,131 | 18,532 | 15.71 | 372,609 | 23,718 | 15.71 |
| 15 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total CMHC | \$1,480,833 | 139,974 | \$10.58 | \$2,052,154 | 151,789 | \$13.52 | \$3,532,987 | 291,763 | \$12.11 |
| Partial Hospitalization Programs (PIIP) | | | | | | | | | |
| 31 | \$242,364 | 44,828 | \$ 5.41 | \$312,543 | 48,203 | \$ 6.48 | \$554,907 | 93,031 | \$ 5.96 |
| 32 | 117,313 | 4,394 | 26.70 | 99,501 | 2,939 | 33.86 | 216,814 | 7,333 | 29.57 |
| 33 | 94,777 | 19,661 | 4.82 | 112,703 | 23,759 | 4.74 | 207,480 | 43,420 | 4.78 |
| 34 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 35 | 12,376 | 2,451 | 5.05 | 3,319* | 657* | 5.05 | 15,695* | 3,108* | 5.05 |
| 36 | 60,834 | 22,988 | 2.65 | 74,984 | 26,774 | 2.80 | 135,818 | 49,762 | 2.73 |
| 37 | 142,583 | 11,607 | 12.28 | 132,313 | 10,534 | 12.56 | 274,896 | 22,141 | 12.42 |
| 38 | 157,933 | 25,461 | 6.20 | 142,260 | 26,355 | 5.40 | 300,193 | 51,816 | 5.79 |
| 39 | 43,862 | 21,217 | 2.07 | 66,908 | 26,483 | 2.53 | 110,770 | 47,700 | 2.32 |
| 40 Data not available | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 41 | 47,074 | 10,481 | 4.49 | 56,382 | 9,812 | 5.75 | 103,456 | 20,293 | 5.10 |
| 42 | 33,053 | 10,221 | 3.23 | 35,442 | 10,629 | 3.33 | 68,495 | 20,850 | 3.29 |
| 43 | 39,862 | 6,745 | 5.91 | 52,201 | 7,928 | 6.58 | 92,063 | 14,673 | 6.27 |
| 44 | 108,923 | 20,708 | 5.26 | 219,672 | 44,756 | 4.91 | 328,595 | 65,464 | 5.02 |
| 45 | 39,163 | 5,837 | 6.71 | 98,882 | 11,468 | 8.62 | 138,045 | 17,305 | 7.98 |
| Total PIIP | \$1,140,117 | 206,599 | \$ 5.52 | \$1,407,110 | 250,297 | \$ 5.62 | \$2,547,227 | 456,896 | \$ 5.58 |
| Grand Total | \$2,620,950 | 346,573 | \$ 7.56 | \$3,459,264 | 402,086 | \$ 8.60 | \$6,080,214 | 748,659 | \$ 8.12 |

* Data not complete for facility.

EXHIBIT 95(1)

HHS, Office of the Secretary

SERVICE COMPONENT COSTS BY FACILITY

| Facility | FIRST YEAR | | SECOND YEAR | | TOTAL DEMONSTRATION | |
|------------|--------------|-------------------------|--------------|-------------------------|---------------------|-------------------------|
| | Outpatient | Partial Hospitalization | Outpatient | Partial Hospitalization | Outpatient | Partial Hospitalization |
| CMCH'S | | | | | | |
| 1 | \$ 48,689 | \$ 123,341 | \$ 10,551* | \$ 25,287* | \$ 59,240* | \$ 148,628* |
| 2 | 93,531 | 121,206 | 131,057 | 139,027 | 224,588 | 260,233 |
| 3 | 117,194 | 77,716 | 133,992 | 116,154 | 251,186 | 193,870 |
| 4 | 38,535* | -- | -- | -- | 38,535* | -- |
| 5 | 16,894 | 318,015 | 28,598 | 383,076 | 45,492 | 701,091 |
| 6 | 84,297* | 91,793* | 104,533* | 110,213* | 188,830* | 202,006 |
| 7 | -- | -- | -- | -- | -- | -- |
| 8 | 45,165 | Ø | 47,015 | Ø | 92,180 | Ø |
| 9 | 331,450 | 31,944 | 325,946 | 45,255 | 657,396 | 77,199 |
| 10 | 20,852 | Ø | 67,917 | Ø | 88,769 | Ø |
| 11 | 160,862 | 17,258 | 222,810 | 21,429 | 383,672 | 38,687 |
| 12 | 96,433 | 544,305 | 103,885 | 675,782 | 200,318 | 1,220,087 |
| 13 | 19,631 | 73,777 | 62,196 | 244,800 | 81,827 | 318,577 |
| 14 | 35,998 | 81,478 | 127,650 | 291,131 | 163,648 | 372,609 |
| 15 | -- | -- | -- | -- | -- | -- |
| Total CMHC | \$ 1,109,531 | \$1,480,833 | \$ 1,366,150 | \$ 2,052,154 | \$ 2,475,681 | \$3,532,987 |
| AMHC'S | | | | | | |
| 16 | \$ 17,076 | -- | \$ 39,495 | -- | \$ 56,571 | -- |
| 17 | 136,821 | -- | 136,676 | -- | 273,497 | -- |
| 18 | 86,520 | -- | 124,289 | -- | 210,809 | -- |
| 19 | -- | -- | -- | -- | -- | -- |
| 20 | 23,753 | -- | 41,493 | -- | 65,246 | -- |
| 21 | 37,779 | -- | 75,764 | -- | 113,543 | -- |
| 22 | -- | -- | -- | -- | -- | -- |
| 23 | 108,769 | -- | 178,086 | -- | 286,855 | -- |
| 24 | 50,425 | -- | 45,974 | -- | 96,399 | -- |
| 25 | 56,521 | -- | 53,247 | -- | 109,768 | -- |
| 26 | 37,394* | -- | -- | -- | 37,394* | -- |
| 27 | 266,269 | -- | 452,917 | -- | 719,186 | -- |
| 28 | 90,425 | -- | 105,638 | -- | 196,063 | -- |
| 29 | -- | -- | -- | -- | -- | -- |
| 30 | 39,435 | -- | 69,308 | -- | 108,743 | -- |
| Total AMHC | \$ 951,187 | -- | \$ 1,322,887 | -- | \$ 2,274,074 | -- |

* Complete data not available.

| Facility | FIRST YEAR | | SECOND YEAR | | TOTAL DEMONSTRATION | |
|----------------------------------|--------------|-------------------------|--------------|-------------------------|---------------------|-------------------------|
| | Outpatient | Partial Hospitalization | Outpatient | Partial Hospitalization | Outpatient | Partial Hospitalization |
| Partial Hospitalization Programs | | | | | | |
| 31 | -- | \$ 242,364 | -- | \$ 312,543 | -- | \$ 554,907 |
| 32 | -- | 117,313 | -- | 99,501 | -- | 216,814 |
| 33 | -- | 94,777 | -- | 112,703 | -- | 207,480 |
| 34 | -- | -- | -- | -- | -- | -- |
| 35 | -- | 12,376 | -- | 3,319* | -- | 15,695 ^A |
| 36 | 2,255 | 60,834 | 291 | 74,984 | 2,546 | 135,818 |
| 37 | -- | 142,583 | -- | 132,313 | -- | 274,896 |
| 38 | -- | 157,933 | -- | 142,260 | -- | 300,193 |
| 39 | -- | 43,862 | -- | 66,908 | -- | 110,770 |
| 40 | -- | -- | -- | -- | -- | -- |
| 41 | -- | 47,074 | -- | 56,382 | -- | 103,456 |
| 42 | 1,924 | 33,053 | 1,459 | 35,442 | 3,383 | 68,495 |
| 43 | -- | 39,862 | -- | 52,201 | -- | 92,063 |
| 44 | -- | 108,923 | -- | 219,672 | -- | 328,595 |
| 45 | 1,635 | 39,163 | 3,164 | 98,882 | 4,799 | 138,045 |
| Total PHP | \$ 5,814 | \$ 1,140,117 | \$ 4,914 | \$ 1,407,110 | \$ 10,728 | \$ 2,547,227 |
| Grand Total | \$ 2,066,532 | \$ 2,620,950 | \$ 2,693,951 | \$ 3,459,264 | \$ 4,760,483 | \$ 6,080,214 |

* Complete data not available.

EXHIBIT 96(1)

IHS, Office of the Secretary

DEMONSTRATION COSTS PER BENEFICIARY
BY SERVICE ENVIRONMENT AND TYPE OF FACILITY

| Type of Facility | OUTPATIENT | | | PARTIAL HOSPITALIZATION | | | TOTAL DEMONSTRATION | | |
|------------------|------------------|--------------------------|-----------------------------|-------------------------------|---------------------------------------|--|----------------------|------------------------------|------------------|
| | Outpatient Costs | Outpatient Beneficiaries | Cost/Outpatient Beneficiary | Partial Hospitalization Costs | Partial Hospitalization Beneficiaries | Cost/Partial Hospitalization Beneficiary | Total Facility Costs | Total Facility Beneficiaries | Cost/Beneficiary |
| CMHCs | | | | | | | | | |
| 1 | \$ 59,240* | 340 | \$ 174.24* | \$ 148,628* | 95 | \$1,564.51* | \$ 207,868* | 435 | \$ 477.86* |
| 2 | 224,588 | 537 | 418.23 | 260,233 | 85 | 3,061.56 | 484,821 | 622 | 799.46 |
| 3 | 251,186 | 132 | 1,902.92 | 193,870 | 51 | 3,801.37 | 445,056 | 183 | 2,432.00 |
| 4 | 38,535* | 242 | 159.24* | * | 7 | * | 38,535* | 249 | 154.76* |
| 5 | 45,492 | 318 | 143.06 | 701,091 | 216 | 3,245.79 | 746,583 | 534 | 1,398.10 |
| 6 | 188,830* | 225 | 839.24* | 202,006* | 82 | 2,475.68* | 390,836* | 307 | 1,273.08* |
| 7 | D.N.A. | 323 | -- | D.N.A. | 78 | -- | D.N.A. | 401 | -- |
| 8 | 92,180 | 159 | 579.75 | -- | 4 | -- | 92,180 | 163 | 565.52 |
| 9 | 657,396 | 1,153 | 570.16 | 77,199 | 75 | 1,029.32 | 734,595 | 1,228 | 598.20 |
| 10 | 88,769 | 139 | 638.63 | -- | 0 | -- | 88,769 | 139 | 638.63 |
| 11 | 383,672 | 533 | 719.83 | 38,687 | 46 | 841.02 | 422,359 | 579 | 729.46 |
| 12 | 200,318 | 307 | 652.50 | 1,220,087 | 176 | 6,932.31 | 1,420,405 | 583 | 2,940.80 |
| 13 | 81,827 | 186 | 439.93 | 318,577 | 37 | 8,610.19 | 400,404 | 223 | 1,795.53 |
| 14 | 163,648 | 293 | 558.53 | 372,609 | 97 | 3,841.33 | 536,257 | 390 | 1,375.02 |
| 15 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total CMHCs | \$2,475,681 | 4,887 | \$ 506.59 | \$3,532,987 | 1,049 | \$3,369.96 | \$ 6,008,668 | 5,936 | \$1,012.24 |
| AMHCs | | | | | | | | | |
| 16 | \$ 56,571 | 76 | \$ 744.36 | -- | -- | -- | \$ 56,571 | 76 | \$ 744.36 |
| 17 | 273,497 | 374 | 731.28 | -- | -- | -- | 273,497 | 374 | 731.28 |
| 18 | 210,809 | 287 | 734.53 | -- | -- | -- | 210,809 | 287 | 734.53 |
| 19 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 20 | 65,246 | 97 | 672.64 | -- | -- | -- | 65,246 | 97 | 672.64 |
| 21 | 113,543 | 196 | 579.30 | -- | -- | -- | 113,543 | 196 | 579.30 |
| 22 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 23 | 286,855 | 237 | 1,210.36 | -- | -- | -- | 286,855 | 237 | 1,210.36 |
| 24 | 96,399 | 150 | 642.66 | -- | -- | -- | 96,399 | 150 | 642.66 |
| 25 | 109,768 | 269 | 408.06 | -- | -- | -- | 109,768 | 269 | 408.06 |
| 26 | 37,394* | 566 | 66.07* | -- | -- | -- | 37,394* | 566 | 66.07* |
| 27 | 719,186 | 1,118 | 643.28 | -- | -- | -- | 719,186 | 1,118 | 643.28 |
| 28 | 196,063 | 230 | 852.45 | -- | -- | -- | 196,063 | 230 | 852.45 |
| 29 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 30 | 108,743 | 206 | 527.88 | -- | -- | -- | 108,743 | 206 | 527.88 |
| Total AMHCs | \$2,274,074 | 3,806 | \$97.50 | -- | -- | -- | 2,274,074 | 3,806 | \$97.50 |

* Complete cost data not available.
D.N.A. Data not available.

EXHIBIT 96(2)

| Type of Facility | OUTPATIENT | | | PARTIAL HOSPITALIZATION | | | TOTAL DEMONSTRATION | | |
|------------------|------------------|--------------------------|-----------------------------|-------------------------------|---------------------------------------|--|----------------------|------------------------------|------------------|
| | Outpatient Costs | Outpatient Beneficiaries | Cost/Outpatient Beneficiary | Partial Hospitalization Costs | Partial Hospitalization Beneficiaries | Cost/Partial Hospitalization Beneficiary | Total Facility Costs | Total Facility Beneficiaries | Cost/Beneficiary |
| PHPs | -- | -- | -- | \$ 554,907 | 199 | \$2,788.48 | \$ 554,907 | 199 | \$2,788.48 |
| 31 | -- | -- | -- | 216,814 | 32 | 6,775.44 | 216,814 | 32 | 6,775.44 |
| 32 | -- | -- | -- | 207,480 | 65 | 3,192.00 | 207,480 | 65 | 3,192.00 |
| 33 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 34 Dropped Out | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 35 | -- | -- | -- | 15,695* | 18 | 871.94* | 15,695* | 18 | 871.94* |
| 36 | 2,546 | -- | -- | 135,818 | 71 | 1,912.93 | 138,364 | 71 | 1,948.79 |
| 37 | -- | -- | -- | 274,896 | 70 | 3,927.09 | 274,896 | 70 | 3,927.09 |
| 38 | -- | -- | -- | 300,193 | 74 | 4,056.66 | 300,193 | 74 | 4,056.66 |
| 39 | -- | -- | -- | 110,770 | 37 | 2,993.78 | 110,770 | 37 | 2,993.78 |
| 40 | D.N.A. | -- | -- | D.N.A. | 132 | -- | D.N.A. | 132 | -- |
| 41 | -- | -- | -- | 103,456 | 30 | 3,448.53 | 103,456 | 30 | 3,448.53 |
| 42 | 3,383 | -- | -- | 68,495 | 39 | 1,756.28 | 71,878 | 39 | 1,843.03 |
| 43 | -- | -- | -- | 92,063 | 30 | 3,068.77 | 92,063 | 30 | 3,068.77 |
| 44 | -- | -- | -- | 328,595 | 65 | 5,055.31 | 328,595 | 65 | 5,055.31 |
| 45 | 4,799 | -- | -- | 138,045 | 29 | 4,760.17 | 142,844 | 29 | 4,925.66 |
| Total PHPs | 10,728 | -- | -- | 2,547,227 | 891 | 2,858.84 | 2,557,955 | 891 | 2,870.88 |
| GRAND TOTAL | \$4,760,483 | 8,693 | \$ 547.62 | \$6,080,214 | 1,940 | \$3,134.13 | \$10,840,697 | 10,633 | \$1,019.53 |

* Complete cost data not available.
D.N.A. Data not available.

EXHIBIT 97

HHS, Office of the Secretary

AVERAGE COST PER BENEFICIARY
BY LIMIT STATUS

| | Average Outpatient Cost Per Beneficiary | Average Partial Hospitalization Cost Per Beneficiary | Average Total Cost Per Beneficiary |
|---------------------------|--|--|---------------------------------------|
| \$750 Limit Facilities | CMHC $\frac{1,079,735}{2,258}$ \$478.18 | $\frac{2,683,108}{712}$ \$3,768.40 | $\frac{3,762,843}{2,970}$ \$1,266.95 |
| | AMHC $\frac{1,339,683}{2,484}$ \$539.33 | N/A | \$539.33 |
| No Limit Facilities | CMHC $\frac{1,395,946}{2,306}$ \$605.35 | $\frac{849,879}{248}$ \$3,426.93 | $\frac{2,245,825}{2,554}$ \$879.34 |
| | AMHC $\frac{934,409}{1,322}$ \$706.82 | N/A | \$706.82 |

EXHIBIT 98

HHS, Office of the Secretary

MMHD FACILITIES
SOURCES OF REVENUE

| | <u>1979</u> | <u>1980</u> | <u>1981</u> | <u>1982</u> | <u>1983</u> |
|-------------------|--------------|--------------|--------------|--------------|--------------|
| <u>CMHCS</u> | | | | | |
| Federal | \$ 4,748,594 | \$ 5,425,918 | \$ 4,921,514 | \$ 3,312,672 | \$ 2,326,396 |
| State/Local | 10,662,139 | 19,228,953 | 23,449,353 | 26,958,141 | 27,736,130 |
| Medicare | 127,586 | 399,212 | 1,484,263 | 2,183,065 | 1,657,221 |
| Other Third Party | 724,212 | 3,570,582 | 4,391,156 | 4,989,787 | 5,885,212 |
| All Other | 1,990,457 | 6,181,580 | 6,716,762 | 8,479,727 | 8,704,096 |
| Total Funding | 18,252,988 | 34,806,245 | 40,963,048 | 45,923,392 | 46,509,055 |
| | N = 7 | N = 10 | N = 10 | N = 10 | N = 10 |
| <u>AMHCs</u> | | | | | |
| Federal | 114,889 | 112,029 | 103,338 | 49,908 | 53,102 |
| State/Local | 6,555,318 | 7,852,259 | 9,233,050 | 10,344,551 | 11,524,320 |
| Medicare | 12,791 | 29,147 | 190,151 | 778,597 | 764,201 |
| Other Third Party | 933,261 | 1,116,041 | 1,366,072 | 1,607,023 | 1,808,644 |
| All Other | 3,207,268 | 2,592,501 | 2,494,390 | 2,728,326 | 2,782,421 |
| Total Funding | 10,823,527 | 11,701,977 | 13,387,001 | 15,508,405 | 16,932,688 |
| | N = 10 | N = 11 | N = 11 | N = 11 | N = 11 |
| <u>PHPs</u> | | | | | |
| Federal | 167,675 | 302,344 | 530,251 | 300,995 | 217,298 |
| State/Local | 966,256 | 2,150,917 | 2,325,814 | 2,640,959 | 3,413,597 |
| Medicare | -- | 4,536 | 233,761 | 889,582 | 747,176 |
| Other Third Party | 621,233 | 1,629,212 | 1,823,880 | 2,491,479 | 2,873,404 |
| All Other | 182,141 | 445,839 | 439,934 | 532,806 | 651,091 |
| Total Funding | 1,937,305 | 4,532,848 | 5,353,640 | 6,855,821 | 7,902,566 |
| | N = 5 | N = 10 | N = 10 | N = 11 | N = 11 |

EXHIBIT 99

HHS, Office of the Secretary

TOTAL ANNUAL REVENUES AND PERCENT CHANGE
BY REVENUE SOURCE AND FACILITY TYPE
BASED ON REPORTED RESOURCES FOR
1979, 1981, 1982, AND 1983

| | <u>1980</u> | <u>1981</u> | <u>1982</u> | <u>1983</u> |
|-------------------|-------------|-------------|-------------|-------------|
| <u>CMHCS</u> | | | | |
| Federal | +14.3%* | -9.3% | -32.7% | -29.8% |
| State/Local | +80.3 | +21.9 | +15.0 | +2.9 |
| Medicare | +212.9 | +271.8 | +47.1 | -24.1 |
| Other Third Party | +393.0 | +23.0 | +13.6 | +17.9 |
| All Other | +210.6 | +8.7 | +26.2 | +5.0 |
| Total Funding | +90.7 | +17.7 | +12.1 | +1.3 |

* 1979 N = 7; 1980* N = 10

| | | | | |
|-------------------|--------|--------|--------|-------|
| <u>AMHCs</u> | | | | |
| Federal | +2.5%* | -7.8% | -51.7% | +6.4% |
| State/Local | +19.8 | +17.6 | +12.0 | +11.4 |
| Medicare | +128.9 | +552.3 | +309.5 | -1.8 |
| Other Third Party | +19.6 | +22.4 | +17.6 | +12.5 |
| All Other | -19.2 | -3.8 | +9.4 | +2.0 |
| Total Funding | +8.1 | +14.4 | +15.8 | +9.2 |

* 1979 N = 10; 1980* N = 11

| | | | | |
|-------------------|---------|---------|--------|--------|
| <u>PHPs</u> | | | | |
| Federal | +80.3%* | +75.4% | -43.2% | -27.8% |
| State/Local | +122.6 | +8.1 | +13.5 | +29.3 |
| Medicare | -- | +5053.5 | +280.6 | -16.0 |
| Other Third Party | +162.3 | +11.9 | +36.6 | +15.3 |
| All Other | +144.8 | -1.3 | +21.1 | +22.2 |
| Total Funding | +134.0 | +18.1 | +28.0 | +15.3 |

* 1979 N = 5; 1980+81 N = 10; 1982+83 N = 11

EXHIBIT 100

HHS, Office of the Secretary

TOTAL ANNUAL REVENUES AND PERCENT
MEDICARE REVENUES BY YEAR

| | <u>1979</u> | <u>1980</u> | <u>1981</u> | <u>1982</u> | <u>1983</u> |
|------------------------------|--------------|--------------|--------------|--------------|--------------|
| <u>CMHCS</u> | | | | | |
| Total Funding | \$18,252,988 | \$34,806,245 | \$40,963,048 | \$45,923,392 | \$46,509,055 |
| % Change Year-to-Year | -- | +90.7% | +17.7% | +12.1% | +1.3% |
| % Medicare of Total Revenues | 0.7% | 1.1% | 3.6% | 4.8% | 3.6% |
| Medicare Revenue | \$127,586 | \$399,212 | \$1,484,263 | \$2,183,065 | \$1,657,221 |
| % Change Year-to-Year | -- | +212.9% | +271.8% | +47.1% | -24.1% |
| No. of Reporting Facilities | 7 | 10 | 10 | 10 | 10 |
| <u>AMHCS</u> | | | | | |
| Total Funding | \$10,823,527 | \$11,701,977 | \$13,387,001 | \$15,508,405 | \$16,932,688 |
| % Change Year-to-Year | -- | +8.1% | +14.4% | +15.8% | +9.2% |
| % Medicare of Total | 0.1% | 0.2% | 1.4% | 5.0% | 4.5% |
| Medicare Amount | \$12,791 | \$29,147 | \$190,151 | \$778,597 | \$765,201 |
| % Change Year-to-Year | -- | +128.9% | +552.3% | +309.5% | -1.8% |
| No. of Reporting Facilities | 10 | 11 | 11 | 11 | 11 |
| <u>PHPS</u> | | | | | |
| Total Funding | \$1,937,305 | \$4,532,848 | \$5,353,640 | \$6,855,821 | \$7,902,566 |
| % Change Year-to-Year | -- | +134.0% | +18.1% | +28.0% | +15.3% |
| % Medicare of Total | 0.0% | 0.1% | 4.4% | 13.0% | 9.5% |
| Medicare Amount | -- | \$4,536 | \$233,761 | \$889,582 | \$747,176 |
| % Change Year-to-Year | -- | -- | +5053.5% | 280.6% | -16.0% |
| No. of Reporting Facilities | 5 | 10 | 10 | 11 | 11 |

EXHIBIT 101

HHS, Office of the Secretary

AVERAGE TOTAL REVENUES, MEDICARE
REVENUES, AND PERCENT CHANGE
YEAR-TO-YEAR

| | <u>1979</u> | <u>1980</u> | <u>1981</u> | <u>1982</u> | <u>1983</u> |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|
| <u>CMHCS</u> | | | | | |
| Average Total Funding/ Facility | \$2,607,570 | \$3,480,624 | \$4,096,305 | \$4,592,339 | \$4,650,906 |
| % Change Year-to-Year | -- | +33.5% | +17.7% | +12.1% | +1.3% |
| Average Medicare Funding/ Facility | \$18,227 | \$39,921 | \$148,426 | \$218,307 | \$165,722 |
| % Change Year-to-Year | -- | +119.0% | +271.8% | +47.1% | -24.1% |
| Number of Facilities | 7 | 10 | 10 | 10 | 10 |
| <u>AMHCs</u> | | | | | |
| Average Total Funding/ Facility | \$1,082,353 | \$1,063,816 | \$1,217,000 | \$1,409,855 | \$1,539,335 |
| % Change Year-to-Year | -- | -1.7% | +14.4% | +15.8% | +9.2% |
| Average Medicare Funding/ Facility | \$1,279 | \$2,650 | \$17,286 | \$70,782 | \$69,473 |
| % Change Year-to-Year | -- | +107.2% | +552.3 | +309.5% | -1.8% |
| Number of Facilities | 10 | 11 | 11 | 11 | 11 |
| <u>PHPs</u> | | | | | |
| Average Total Funding/ Facility | \$387,461 | \$453,285 | \$535,364 | \$718,415 | +15.3% |
| % Change Year-to-Year | -- | +17.0% | +18.1% | +16.4% | |
| Average Medicare Funding/ Facility | 0 | \$454 | \$23,376 | \$80,871 | \$67,925 |
| % Change Year-to-Year | -- | -- | +5048.9% | +246.0% | -16.0% |
| Number of Facilities | 5 | 10 | 10 | 11 | 11 |

4. HOW WERE THE CHARACTERISTICS OF PARTICIPATING SITES AFFECTED BY THE DEMONSTRATION?

This section describes changes in facility characteristics to accommodate the requirements of the demonstration. Changes, where applicable, are described in seven areas: (1) program characteristics, (2) staffing, (3) clinical personnel management, (4) client flow, (5) services, (6) administration and management, and (7) public awareness.

The information shown represents a descriptive analysis of items collected on the "Demonstration Site Program Interview Guide" and is presented separately for each one of the areas delineated above. The information is based upon personal interviews conducted during on-site visits to the demonstration facilities.

(1) Facility Identification

Following the descriptive analysis is Exhibit 102, which displays reported changes due to the MMHD for the demonstration facilities according to type of facility, e.g., CMHC, AMHC, and PHP. No facility is identified by name, only by number. These data are presented in an attempt to understand the programmatic impact of various demonstration requirements concerning: staffing (QMHP types, definition, and related requirements); clinical recordkeeping (psychiatrist sign-off, treatment plan, progress notes, drug use profile, and discharge summary); and other administrative and management related requirements (cost reporting and billing). It is important to understand the impact of the MMHD in these terms if the types of operational requirements and cost-related reimbursement methodology employed in the demonstration are utilized nationally.

(2) Program Characteristics

In general, program characteristics did not change significantly as a result of the demonstration. Two facilities indicated that weekend service delivery hours had been increased. One facility reported that partial

hospitalization services had been established as a result of the demonstration. Two facilities reported starting new programs of service delivery off-site in several local boarding homes or nursing homes. One facility reported adding the elderly Medicare beneficiaries to its priority clientele. One facility spun off its partial hospitalization program in order to simplify accounting and billing procedures.

(3) Staffing

Several facets of the demonstration had a noticeable and significant impact on the staffing patterns of the facilities. One is the requirement for QMHP supervision coupled with the definitions of the QMHPs. Twenty facilities (four CMHCs, six AMHCs, and ten PHPs) reported adding QMHP staff as a result of the MMHD. Twelve more facilities (four CMHCs, five AMHCs, and three PHPs) indicated that staff were shifted to accommodate the supervision requirements. In general, virtually all facilities indicated that some staff responsibilities had increased either as a result of the QMHP supervision requirements or due to a general increase in clinical records management with its attendant quality assurance activities.

Another major change attributed to the demonstration is the increase in psychiatrists' time that was necessary to comply with the requirements that a psychiatrist review and approve all treatment plans and be available on-site (for AMHCs and PHPs) every two weeks or (for CMHCs generally) at least once every week. Twenty facilities (four CMHCs, seven AMHCs, and nine PHPs) indicated that these requirements necessitated an increase in the time their staff or consulting psychiatrist spent reviewing records, providing staff consultation, or providing service directly to beneficiaries.

The third area in which the demonstration had an important impact concerns administration and management. Nine facilities (four CMHCs, four AMHCs, and one PHP) indicated that they had added administrative billing, accounting, or other support staff. Twenty-seven facilities (twelve CMHCs,

six AMHCs, and nine PHPs) also reported that more time was required of their billing and accounting staff as a direct result of the demonstration. This is quite understandable as few of the facilities had ever filed a cost report similar to that required by Medicare or, stated another way, few had ever been reimbursed for services on a cost-related basis. Several facilities, in fact, had never been reimbursed by a third-party payor, which necessitated setting up a billing system.

Several other changes due to the demonstration are also worthy of note. First, eleven facilities (four CMHCs, six AMHCs, and one PHP) reported that QMHPs made (due to the demonstration) off-site visits previously made by non-QMHPs or were added specifically to provide off-site therapy. This is a result of only indirect coverage of non-QMHPs for this type of service delivery. However, one facility indicated that QMHPs made more institutional visits as opposed to home visits. Five facilities (two CMHCs and three PHPs) reported adding non-QMHP clinical staff to support the delivery of services to Medicare beneficiaries. Two facilities (one CMHC and one PHP) reported that administrative or support staff were shifted to accommodate the billing and cost reporting requirements of the demonstration. One facility reported that QMHP definitions would be utilized in the future, regardless of the demonstration, as an aid in selecting new staff.

(4) Clinical Personnel Management

As noted in the previous section, several requirements of the demonstration had a major impact on the facilities. With respect to clinical personnel management, the most notable impact was the necessity for a psychiatrist to review and sign-off on the treatment plan for every beneficiary. Thirty-one facilities (twelve CMHCs, eight AMHCs, and eleven PHPs) reported that their staff or consulting psychiatrist was newly responsible for these activities. In some cases, this requirement simply formalized a process in use by the facility. In other cases, the psychiatrists'

review and approval was an altogether new step in facility processes. In either case, as noted previously, twenty facilities indicated that more time of their staff or consulting psychiatrist was required.

Coincident with this reported impact is that of the requirement for QMHP review of treatment plans. Twenty-six facilities (twelve CMHCs, five AMHCs, and nine PHPs) reported that QMHPs were more involved in the development and review of treatment plans. In general, treatment plans and other clinical records were expanded by the facilities as noted in the next section. The role of QMHPs also increased to include supervisory activities in seventeen facilities (five CMHCs, seven AMHCs, and five PHPs). Prior to the demonstration, these personnel were not clinical supervisors; however, rather than hire new staff to comply with the QMHP supervision requirements of the MMHD, these facilities chose to shift staff organizationally and/or physically.

Another area of clinical management that was significantly affected by the demonstration is that of utilization review/quality assurance (UR/QA). Twenty-five facilities (five CMHCs, nine AMHCs, and eleven PHPs) reported that UR/QA plans were established or changed significantly as a result of the demonstration. Frequent responses centered on the more formalized approach to UR/QA required by the MMHD as well as the increased requirements for signatures (by psychiatrists and other QMHPs) and the increased frequency of review of clinical records.

In general, the increased requirements for clinical recordkeeping and subsequent review were cited as major reasons for the increase in time required of psychiatrists and other QMHPs. Only four facilities indicated that psychiatric consultation to clinical staff had increased as a result of the demonstration.

(5) Client Flow

In general, the flow of clients through the facilities was not significantly affected by the demonstration. Five facilities indicated that, as a result of

the demonstration, Medicare beneficiaries were diagnosed more formally or were seen by the facility's psychiatrist for evaluation. In these cases, clients had more access to psychiatric care. One AMHC reported that the demonstration allowed for a higher level of crisis intervention, which altered the way in which clients were seen. Another AMHC indicated that elderly clients usually required extended periods of treatment with more gradual progress as compared to their other clients. One PHP reported that Medicare beneficiaries were tested for vocational training earlier than other clients as a result of the demonstration. One PHP indicated that all clients in the MMHD project were seen by a psychiatrist unlike others in treatment.

Borrowing from other sections of this chapter it is clear that staff responsibilities, as they relate to the flow of clients, changed. The cited impacts of psychiatrist and other QMHP involvement in treatment plan development, review, and approval added steps that relate indirectly to the flow of clients. The criteria and processes of that flow, however, do not seem to have been affected by the demonstration to a significant degree.

(6) Services

The array of services available to Medicare beneficiaries prior to the MMHD is quite similar to that available during the demonstration. Utilization of those services is discussed elsewhere in this report. Moreover, from the point of view of facility administration, very few changes were reported. Two facilities indicated that direct psychiatric care was made available as a result of the demonstration. Another facility indicated that art therapy had been added as well as home visits by physicians. In addition, this facility and another facility indicated that medication therapy had increased significantly. One facility reported that a free lunch was now being made available to Medicare beneficiaries. Two facilities reported that group therapy was added or expanded. Two facilities reported that partial hospitalization or day treatment services had been formally added as a result of the demonstration. Two facilities reported that outreach visits to nursing homes or congregate care facilities had been expanded.

Three facilities indicated that transportation services were stepped up to bring elderly clients to the facility. Two facilities reported that the MMHD had encouraged home visits, while another facility indicated that off-site visits were discouraged by the MMHD coverage rules, thus more services were performed on-site.

(7) Administration And Management

In terms of overall administration and management responses to the requirements of the demonstration, two areas clearly surfaced as having been impacted. One deals with the content and extent of clinical records; the other deals with billing policies. It should be noted here that "release of information" forms specifically for the MMHD and signed by Medicare beneficiaries were also added to the clinical records by the facilities. In terms of other changes to clinical records, twenty-six facilities (ten CMHCs, nine AMHCs, and seven PHPs) reported that the addition or expansion of a treatment plan as defined by the MMHD was of significant importance. Some of the facilities felt that this simply formalized or formally documented a process that was really in place; however, to others a new process was put in place.

Concurrent with the development or expansion of a treatment plan was the general expansion of other clinical records: eighteen facilities (eight CMHCs, six AMHCs, and four PHPs) reported adding or significantly expanding the drug use profile; seventeen facilities (five CMHCs, seven AMHCs, and five PHPs) reporting adding or significantly expanding progress notes; and twenty facilities (five CMHCs, eight AMHCs, and seven PHPs) reporting adding or significantly expanding the discharge summary.

Changes were reported from previous practices in the development and preparation of cost reports and bills. Eighteen facilities (five CMHCs, five AMHCs, and eight PHPs) cited these activities as requiring more time of administrative, accounting, billing, and support staff. Previously, it was noted that nine facilities added staff to handle administrative duties

and two others shifted staff organizationally and/or physically for the same reason. As also noted earlier, twenty-seven facilities (twelve CMHCs, six AMHCs, and nine PHPs) indicated that all facets of the MMHD required more staff time.

Thirteen facilities (five CMHCs, five AMHCs, and three PHPs) reported that Medicare beneficiaries would be billed for the 20 percent coinsurance. It is clear that, for many facilities, clients had not been billed, particularly if it was determined that they could not pay. Title XX programs precluded billing of clients for services rendered. However, under the demonstration, the beneficiary was to be billed or the facility must have made a reasonable attempt to collect the coinsurance before it was written off as a bad debt.

Incidental impacts of the MMHD included: six facilities noted that accounting changes had taken place; twenty-three facilities (nine CMHCs, six AMHCs, and eight PHPs) noted that billing and collection procedures had changed or been established; and two facilities reported that other revenue sources had reduced funding as a result of the demonstration. One facility indicated a markedly increased effort to collect the coinsurance, including, in one case, the use of a collection agency. Two facilities reported the development of standard documentation of indigency.

In general, it seems that the clinical recordkeeping requirements and the preparation of cost reports and bills were by far the two most significant aspects of the demonstration from the point of view of overall program administration and management. Many of the elements which comprise these two systems of recording and reporting were either not formally in place in some facilities or nonessential to them and hence nonexistent. The demonstration played a major role in the development of these two operational aspects of the facilities.

(8) Public Awareness

The facilities utilized a variety of means to make the public aware of their participation in the MMHD, ranging from informal notification and discussion of the project to mass mailings of specifically developed promotional materials to radio advertising spots. Twenty-eight facilities (ten CMHCs, eight AMHCs, and ten PHPs) reported either informal or formal notification of referral sources such as other mental health clinics, elderly service agencies, hospitals, nursing homes, residential facilities serving the elderly, and physicians. Many of these also reported either informal or formal notification of county organizations or community groups whose specific interest is targeted to the elderly. Eight facilities developed brochures or other promotional materials. Five of these facilities made mass mailings or presentations to referral sources and other interested agencies. Six facilities placed advertisements in newspapers or were mentioned on the radio. One facility was mentioned in a national newsletter. One facility gained the cooperation of the local district office of the Social Security Administration and ensured the mailing of a promotional piece to all local SSA beneficiaries.

Another important way in which the demonstration was publicized was by word of mouth from beneficiaries being treated in the facilities. The MMHD was also publicized through the process of obtaining permission to release information from beneficiaries.

HHS, Office of the Secretary

CHANGES DUE TO MMHD

| Facility | Program Characteristics (I) | Staffing (II) | Clinical Personnel Management (IV) | Client Flow (V) | Services (VI) | Administration and Management (VII) | Public Awareness (VIII) |
|------------------------|--------------------------------|---|--|---|------------------|---|---|
| COMMUNITY MENTAL 01 | | <ul style="list-style-type: none"> Billing clerk transferred and given responsibility for Medicare billing More accounting, billing, and support staff time required Added QMHP to Day Treatment Program Increased psychiatric time | <ul style="list-style-type: none"> Psychiatrist will approve all treatment plans | | | <ul style="list-style-type: none"> Drug use profile and copy of Medicare card placed in clinical record Medicare beneficiaries will be billed for co-insurance Preparation of cost reports required computer changes and more staff time Accounting system altered to include MMHD | <ul style="list-style-type: none"> Referral sources notified informally |
| 02 | | <ul style="list-style-type: none"> QMHPs making off-site visits previously made by non-QMHPs Non-QMHPs responsible for obtaining treatment plan approval Staff shifted to comply with QMHP supervision requirements More accounting, billing, and support staff time required | <ul style="list-style-type: none"> QMHPs will be involved in treatment plan development Psychiatrist will approve all treatment plans QMHPs will review clinical records | <ul style="list-style-type: none"> Medicare beneficiaries see psychiatrist prior to treatment | | <ul style="list-style-type: none"> Drug use profile expanded and placed in clinical record Treatment plan expanded Medicare beneficiaries will be billed for co-insurance Co-insurance collection procedures altered Preparation of cost reports required computer changes and more staff time | <ul style="list-style-type: none"> Referral sources notified informally |
| 03 | | <ul style="list-style-type: none"> More accounting, support, and other staff time required | <ul style="list-style-type: none"> Psychiatrist will approve all treatment plans QMHPs will review all clinical records Nurse will prepare drug use profile for MD approval | | | <ul style="list-style-type: none"> Drug use profile expanded Treatment plan expanded Medicare beneficiaries will be billed for co-insurance Preparation of cost reports and new billing procedures require more staff time | <ul style="list-style-type: none"> Mention of demonstration participation in a national newsletter Informal talks with community groups |
| 04 | | <ul style="list-style-type: none"> More clerical staff time required Added administrative duties for the Coordinator of Elderly Services More QMHP time required for clinical reviews of non-QMHP staff | <ul style="list-style-type: none"> UR/QA plan developed Psychiatrist will approve and supervise all treatment plans | <ul style="list-style-type: none"> Encourage "non-registered" clients to formally become Center patients | | <ul style="list-style-type: none"> Treatment plan expanded Discharge summary expanded Preparation of cost reports and Medicare billing procedures required more staff time | <ul style="list-style-type: none"> Newspaper articles Speaking engagements Liaisons with Council on Aging and boarding and nursing homes |
| 05 | | <ul style="list-style-type: none"> Records clerk added Billing clerk added Increased psychiatric time | <ul style="list-style-type: none"> Greater involvement by psychiatrist and QMHPs in treatment plan development and approval and records review Review process simplified | | | | |

EXHIBIT 102(2)

| Facility | Program Characteristics (I) | Staffing (II) | Clinical Personnel Management (IV) | Client Flow (V) | Services (VI) | Administration and Management (VII) | Public Awareness (VIII) |
|----------|--------------------------------|--|---|--------------------|--|---|--|
| 06 | | <ul style="list-style-type: none"> QMHs spread around to nursing homes that are served Three FTE QMHs added, including: one nonpsychiatric physician, one psychiatric nurse, and two MSWs .8 FTE non-QMHP therapists added Additions due primarily to MMHID, somewhat attrition More accounting, support, and other staff time required | <ul style="list-style-type: none"> QMHs will be involved in all treatment plan development Psychiatrist will approve all treatment plans More attention given to clinical recording Clinical staff supervision now provided by QMHs | | <p>MMHID has encouraged working with individuals in on-site outpatient setting; discouraged working off-site</p> | <ul style="list-style-type: none"> Collection procedures more vigorous Additional time spent with beneficiaries to assist in eligibility determination | <ul style="list-style-type: none"> Informal outreach done to nursing homes hospital, senior citizen groups Promotional materials developed In-house case finding |
| 07 | | <ul style="list-style-type: none"> Billing clerk added Staff responsibilities for UR/QA increased More accounting and billing staff time required | <ul style="list-style-type: none"> QMHs will be involved in all treatment plan development Psychiatrist will approve all treatment plans UR/QA plan expanded | | | <ul style="list-style-type: none"> Treatment plan expanded Progress notes expanded Drug use profile expanded Discharge summary expanded Billing procedures changed | <ul style="list-style-type: none"> Demonstration participation noted at county meetings County elderly program notified |
| 08 | | <ul style="list-style-type: none"> Beneficiaries in the Community Support Program with paraprofessionals as a primary therapist reassigned to QMHs as their primary therapists | <ul style="list-style-type: none"> Psychiatrist approves all treatment plans QMHs involved in treatment plan development and sign off on the treatment plan Formalized UR plan | | | <ul style="list-style-type: none"> Treatment plan expanded Progress notes expanded Drug use profile expanded Discharge summary expanded | <ul style="list-style-type: none"> Referral agencies formally notified of MMHID |

| Facility | Program Characteristics (I) | Staffing (II) | Clinical Personnel Management (IV) | Client Flow (V) | Services (VI) | Administration and Management (VII) | Public Awareness (VIII) |
|----------|---|--|---|-----------------|--|--|---|
| 09 | | <ul style="list-style-type: none"> Personnel in the Elderly Program are delivering more services within the CMHC (as opposed to in the community) QMHP staff are making more "institutional" visits, particularly to long-term care facilities Business Office staff are paying greater attention to (and spending more time on) the billing aspects of treatment More time of psychiatrist required | <ul style="list-style-type: none"> Psychiatrist will approve all treatment plans QC program paying greater attention to medical record reviews | | | <ul style="list-style-type: none"> Treatment plan has been revised Billing for more and varied services Billing beneficiaries for co-insurance but only if they are not Title XX eligible (previously did not bill) | <ul style="list-style-type: none"> Referral agencies notified about MMBID |
| 10 | | | <ul style="list-style-type: none"> QMHPs more involved in treatment plan development Psychiatrist will approve all treatment plans Diagnostic activity increased | | | <ul style="list-style-type: none"> Clinical record keeping upgraded generally Treatment plan expanded Medicare beneficiaries will be billed for co-insurance | Nursing homes contacted |
| 11 | Increased services to the elderly and established new program | <ul style="list-style-type: none"> Added .75 Medicare project supervisor Added .5 Human Services Technician Part-time billing clerk added Part-time accountant added Supervisory responsibilities spread over all QMHPs | <ul style="list-style-type: none"> QMHPs will review and approve clinical records | | <ul style="list-style-type: none"> Added psycho-geriatric day treatment program | <ul style="list-style-type: none"> Treatment plan expanded Drug use profile expanded Discharge summary added to clinical records Progress notes expanded | |
| 12 | | <ul style="list-style-type: none"> Three staff added to administer project A part-time psychiatrist was hired at one clinic | <ul style="list-style-type: none"> More time required of QMHPs for chart review | | <ul style="list-style-type: none"> Expanded to meet demand | <ul style="list-style-type: none"> Treatment plan expanded Billing and cost reporting performed by contract staff at center | Referral sources notified informally |
| 13 | | <ul style="list-style-type: none"> More time required of billing and accounting staff | <ul style="list-style-type: none"> More time required of psychiatrist | | | | |
| 14 | Elderly will be added to priority services | <ul style="list-style-type: none"> Role of physicians changed to increase time for case supervisor | <ul style="list-style-type: none"> QMHPs will be involved in treatment plan development and review Psychiatrist will approve all treatment plans UR procedures developed | | | <ul style="list-style-type: none"> Treatment plan expanded Progress notes expanded Drug use profile added | Series of letters sent to related agencies |
| 15 | | REPLACEMENT SITE: DROPPED OUT | | | | | |
| 16 | | | <ul style="list-style-type: none"> QMHPs will be involved in treatment plan development Psychiatrist will approve all treatment plans | | | <ul style="list-style-type: none"> Treatment plan added Drug use profile added Medicare beneficiaries will be billed for co-insurance Co-insurance collection procedures altered | <ul style="list-style-type: none"> Referral sources contacted informally Community groups informed of demonstration participation |
| 17 | | <ul style="list-style-type: none"> More time required of billing and accounting staff | <ul style="list-style-type: none"> Psychiatrist will approve all treatment plans UR procedures developed | | | <ul style="list-style-type: none"> Treatment plan and progress notes expanded Developed a uniform change schedule | |

EXHIBIT 102 (4)

| Facility | Program Characteristics (I) | Staffing (II) | Clinical Personnel Management (IV) | Client Flow (V) | Services (VI) | Administration and Management (VII) | Public Awareness (VIII) |
|----------|---|--|---|---|--|--|---|
| 18 | | <ul style="list-style-type: none"> Added 1.25 FTE QMHP Added .5 FTE accounting staff More time required of all staff | <ul style="list-style-type: none"> More frequent goal-oriented supervision of staff UR/QA activities expanded More frequent case reviews Added QMHP level review | | | <ul style="list-style-type: none"> Progress notes expanded to relate to treatment plan Drug use profile expanded Discharge summary added Medicare beneficiaries will be billed for co-insurance unless Medicaid eligible Separate Medicare billing system set up New cost centers created | <ul style="list-style-type: none"> Referral sources notified informally; county health department, family service center, etc. |
| 19 | | DROPPED OUT | | | | | |
| 20 | | <ul style="list-style-type: none"> Added one QMHP service provider/administrative staff member Volunteer billing clerk added More accounting, billing, and support staff time required More time required of psychiatrist | <ul style="list-style-type: none"> Psychiatrist will approve all treatment plans Consultation with psychiatrist for case review twice monthly Psychiatrist will provide staff in-service training on clinical issues | <ul style="list-style-type: none"> Medicare clients diagnosed more formally Clinical record documentation more formal Psychiatric consultation added | <ul style="list-style-type: none"> Direct psychiatric care now available Services expanded | <ul style="list-style-type: none"> Treatment plan expanded Progress notes expanded Discharge summary expanded All above more formal and placed in clinical record Preparation of cost reports and new billing procedures require more staff time | <ul style="list-style-type: none"> Referral sources notified; hospitals, residential facilities, day programs, and other elderly service agencies Promotional materials developed |
| 21 | | | <ul style="list-style-type: none"> Staff supervision tighter and more frequent Increased accountability due to better documentation Case conferences more frequent and comprehensive QMHP subordinate signs off for non-QMHP superior UR plan revised to include MMHD requirements | <ul style="list-style-type: none"> More medication review possible for MMHD patients | <ul style="list-style-type: none"> Expanded services to nursing homes outside of main office area | <ul style="list-style-type: none"> Progress notes expanded with references to treatment goals Discharge summary revised and expanded Drug use profile revised and expanded Progress notes required to document for billing | <ul style="list-style-type: none"> Held meetings with area nursing home directors to solicit their cooperation Attempted to work with Area Agency on Aging |
| 22 | | DROPPED OUT | | | | | |
| 23 | <ul style="list-style-type: none"> Weekend hours expanded to include MD home visits and educational programs | <ul style="list-style-type: none"> Relocated art therapy activities to main center for QMHP supervision Added .3 FTE psychiatric nurse Added .2 FTE art therapist More psychiatrist time added One QMHP responsibilities altered from primary clinical treatment to coordination of expanded elderly program All staff expanded record keeping and QA activities | <ul style="list-style-type: none"> Physicians more involved in clinical supervision UR/QA plan altered | | <ul style="list-style-type: none"> Art therapy added More home visits by physician added Medication therapy increased | <ul style="list-style-type: none"> Treatment plan expanded Progress notes expanded, more specific Drug use profile added Discharge summary modified Above more formally contained in clinical record Preparation of cost reports and billing procedures require more staff time Accounting system altered to include MMHD | <ul style="list-style-type: none"> Spoke to 16 senior centers Published promotional materials Sent letters to dentists, doctors, and hospitals Newspaper advertisement Radio spots |

EXHIBIT 102(5)

| Facility | Program Characteristics (I) | Staffing (II) | Clinical Personnel Management (IV) | Client Flow (V) | Services (VI) | Administration and Management (VII) | Public Awareness (VIII) |
|----------|--|--|---|---|---------------|---|---|
| 24 | | <ul style="list-style-type: none">• QMIIPs spread over off-site locations• Psychiatrist making more off-site visits• QMIIPs making off-site visits formerly made by nonQMIIPs | <ul style="list-style-type: none">• QMIIPs will be involved in treatment plan development• Psychiatrist will approve all treatment plans | | | <ul style="list-style-type: none">• Developed separate and expanded treatment plan and drug use profile• Medicare beneficiaries will be billed for co-insurance• Co-insurance collection changed• Preparation of cost reports and bills required computer changes | <ul style="list-style-type: none">• Newspaper article published• Social Security District Office sent letter to all beneficiaries• Promotional materials developed for radio and mail |
| 25 | | <ul style="list-style-type: none">• Moved QMIIPs organizationally and physically to supervisory roles• Hired one QMIIP• QMIIP requirements used in hiring any new clinical staff• Added psychiatrist time• More accounting and billing time required• QMIIPs making off-site visits previously made by non-QMIIPs | <ul style="list-style-type: none">• Clinical staff supervision now provided by QMIIPs• Psychiatrist more involved in treatment plan development: will approve all treatment plans• More medication review time required• Expanded UR/QA plan | | | <ul style="list-style-type: none">• Expanded intake, treatment plan, drug use profile forms• Added discharge summary• Medicare beneficiaries will be billed for coinsurance• Bad debt policy established | <ul style="list-style-type: none">• Newspaper article published in local paper |
| 26 | | <ul style="list-style-type: none">• Added one QMIIP• Added one clerk• More time of psychiatrist required | <ul style="list-style-type: none">• Increased psychiatric consultation with staff and for review process• UR/QA activities increased | | | <ul style="list-style-type: none">• Treatment plan developed• Progress notes expanded• Discharge summary developed• Accounting system altered• Preparation of cost reports and billing procedures require more staff time• Medicare client ledgers set up | <ul style="list-style-type: none">• Published notice in newspaper• Notified local service agencies |
| 27 | Saturday services expanded to provide more services to several nursing homes | <ul style="list-style-type: none">• Five part-time QMIIPs hired• Reorganized staff to place QMIIPs in supervisory roles• Contracted for accounting and data processing services including programmer, program analysis, and an accountant• Hired a part-time psychiatrist | <ul style="list-style-type: none">• Clinical staff supervision now provided by QMIIPs• Psychiatrist will review treatment plan certification• Created Utilization Review plan• More time spent on documentation of services provided | New staff allows unit to respond quicker to client crises | | <ul style="list-style-type: none">• Intake form revised to include financial data and more assessment items• Treatment Plan revised to include immediate and long-term goals• Consent form altered• Registration Sheet expanded• Progress notes changed from open format to specific and structured• Utilization Review initiated• Certification procedures revised• Discharge Summary developed• Established fee schedule and sliding pay scale• Established collections policies and procedures• Medicare beneficiaries billed for co-insurance | |



EXHIBIT 102 (6)

| Facility | Program Characteristics (I) | Staffing (II) | Clinical Personnel Management (IV) | Client Flow (V) | Services (VI) | Administration and Management (VII) | Public Awareness (VIII) |
|----------|--|--|---|---|--|--|--|
| 28 | | <ul style="list-style-type: none">Effort made to place QMHP in each of two new offices due to previously planned expansionMore time of psychiatrist required | <ul style="list-style-type: none">Staff supervision is tighter and more frequentIncreased accountability due to better documentationUR developed and implementedCase conferences more frequent and comprehensiveIncreased role of psychiatrists for case review, client contact, and staff training | Elderly clients usually require extended periods of treatment care with more gradual progress | Increased use of transportation by Medicare beneficiaries | <ul style="list-style-type: none">Treatment plan modified to note client strengthsUR Plan developed and implementedDischarge summary developed | <ul style="list-style-type: none">Participation was widely publicized among area social service agencies and other service providers |
| 29 | REPLACEMENT SITE: DROPPED OUT | | | | | | |
| 30 | | | | | | | |
| 31 | <ul style="list-style-type: none">Expanded services into three boarding homes | <ul style="list-style-type: none">More billing clerk time requiredIncreased psychiatrist timeNurse addedAdded volunteers to assist in off-site service deliveryAdded one QMHP for boarding home programNon-QMHPs conduct staff training on MMHD | <ul style="list-style-type: none">Psychiatrist will approve all treatment plansDeveloped UR/QA plan | | <ul style="list-style-type: none">Services expanded to boarding homesTransportation service added | <ul style="list-style-type: none">Expanded discharge summaryMedicare will be billed as first payorMedicare beneficiaries will be billed for co-insuranceMedicaid will be billed for co-insurance (as appropriate)Documentation of indigency has been developedVocational rehabilitation will no longer pay for Medicare beneficiariesPreparation of cost reports and billing procedures require more staff timeMMHD will be billed as first-payorMedicare beneficiaries will be billed for co-insuranceDocumentation of indigency being developed | <ul style="list-style-type: none">Jewish Agency Service for Aged and other committees on aging notifiedSpeaking engagementsPress release |
| 32 | <ul style="list-style-type: none">Psychiatrist more involvedFilled 3 of 5 vacant positions with QMHPs | | <ul style="list-style-type: none">QMHPs more involved in supervisionPsychiatrist will approve all treatment plans and review all cases | | | | |

EXHIBIT 102(7)

| Facility | Program Characteristics (I) | Staffing (II) | Clinical Personnel Management (IV) | Client Flow (V) | Services (VI) | Administration and Management (VII) | Public Awareness (VIII) |
|----------|---|---|--|--|---------------|--|---|
| 33 | <ul style="list-style-type: none"> More psychiatric time Added .25 RN Parent organization billing clerk will handle MMHID billing Vacancy filled to accommodate MMHID QMHFs more involved in record certification Non-QMHFs more involved in record reviews | <ul style="list-style-type: none"> More psychiatric time Added .25 RN Parent organization billing clerk will handle MMHID billing Vacancy filled to accommodate MMHID QMHFs more involved in record certification Non-QMHFs more involved in record reviews | <ul style="list-style-type: none"> Psychiatrist will approve all treatment plans Developed UR/QA plan | | | <ul style="list-style-type: none"> Treatment plan expanded Drug use profile expanded | <ul style="list-style-type: none"> Letters sent to county and aging agencies County in-formed nursing homes |
| 34 | DROPPED OUT | | | | | | |
| 35 | <ul style="list-style-type: none"> QMHF on site three days weekly MSW replaced an RN | <ul style="list-style-type: none"> Psychiatrist will approve and monitor treatment plans Developed UR/QA plan | | | | <ul style="list-style-type: none"> Drug use profile expanded | <ul style="list-style-type: none"> County case managers notified Agency on aging notified |
| 36 | <ul style="list-style-type: none"> More time required of psychiatrist QMHF hired to fill vacant MSW position | <ul style="list-style-type: none"> QMHF now involved in treatment plan review and documentation Psychiatrist will approve all treatment plans UR/QA plan developed More staff meetings required | <ul style="list-style-type: none"> QMHFs more involved in treatment plan development and review Psychiatrists more actively involved in diagnosis and treatment, will approve all treatment plans | | | <ul style="list-style-type: none"> Treatment plan expanded Progress notes expanded Discharge summary expanded Preparation of cost reports and billing procedures requires more staff time Other funding sources reduced | <ul style="list-style-type: none"> Referral agencies notified Local Mental Health Board contacted |
| 37 | <ul style="list-style-type: none"> Vacant position filled by psychiatrist | <ul style="list-style-type: none"> QMHFs more involved in treatment plan development and review Psychiatrists more actively involved in diagnosis and treatment, will approve all treatment plans | <ul style="list-style-type: none"> Medicare beneficiaries tested for vocational training sooner than other clients and given psychiatric evaluation | <ul style="list-style-type: none"> Free lunch provided to MMHID clients | | <ul style="list-style-type: none"> Developed promotional materials Notified mental health agencies, private AHPs, vocational services, and all referral sources | <ul style="list-style-type: none"> Referral agencies notified Local Mental Health Board contacted |
| 38 | <ul style="list-style-type: none"> Supervisory structure reorganized to provide for QMHF supervision More time required for billing and accounting | <ul style="list-style-type: none"> Psychiatrist meets with staff more frequently to review and approve treatment plans Set up UR/QA plan | <ul style="list-style-type: none"> Modified financial intake forms Arranged for Medicaid to pay co-insurance Financial form added Set fee/charge schedule New review form added | | | <ul style="list-style-type: none"> Modified financial intake forms Arranged for Medicaid to pay co-insurance Financial form added Set fee/charge schedule New review form added | <ul style="list-style-type: none"> Liaison with State hospital set up |

EXHIBIT 102(8)

| Facility | Program Characteristics (I) | Staffing (II) | Clinical Personnel Management (IV) | Client Flow (V) | Services (VI) | Administration and Management (VII) | Public Awareness (VIII) |
|----------|--|---|--|---|---|--|--|
| 39 | | <ul style="list-style-type: none"> Added .8 FTE staff person for MMHD administration Contract for part-time psychiatrist QMHP director spending more time with clients | <ul style="list-style-type: none"> Psychiatrist will review cases and assist in staff development activities More frequent program meetings UR/QA plan added | | <ul style="list-style-type: none"> Medication therapy increased | <ul style="list-style-type: none"> Treatment plan expanded Discharge summary added to clinical records Preparation of cost reports and billing requires more staff time Progress notes added to clinical record Log of client medical visits added to clinical record | <ul style="list-style-type: none"> Informed CMHCs and State hospitals specifically about the demonstration |
| 40 | | <ul style="list-style-type: none"> Added .15 FTE QMHP psychologist for group therapy | <ul style="list-style-type: none"> UR/QA plan added | | <ul style="list-style-type: none"> Group therapy expanded Home-bound visits added Transportation service added | <ul style="list-style-type: none"> Develop standardized clinical record-keeping system Physician services billed through MMHD Established new aging accounts system Billing procedures altered Preparation of cost reports and billing requires more staff time | <ul style="list-style-type: none"> Presentations made to family MDs, aging agencies, elderly centers, hospital and nursing home staff |
| 41 | | <ul style="list-style-type: none"> One MSW added More time required of psychiatrist | <ul style="list-style-type: none"> QMHPs more involved in treatment plan development and review Psychiatrist will approve all treatment plans and review all cases UR/QA plan expanded | | <ul style="list-style-type: none"> Psychiatrist more available for direct client contact | <ul style="list-style-type: none"> Billing procedures established Preparation of cost reports and billing requires more staff time | <ul style="list-style-type: none"> Referral agencies notified Funding agencies notified |
| 42 | <ul style="list-style-type: none"> Service program newly incorporated and contracting with MMHD designated facility | <ul style="list-style-type: none"> Replaced RN with MSW | <ul style="list-style-type: none"> QMHP supervision three days weekly More frequent treatment plan reviews | <ul style="list-style-type: none"> Direct referral into program All MMHD clients seen by psychiatrist | <ul style="list-style-type: none"> Added group therapy More frequent individual sessions | <ul style="list-style-type: none"> Billing procedures established Increased billing and reporting time Changes to all clinical record forms Staff training in treatment planning and note keeping Developed co-insurance policy | |
| 43 | <ul style="list-style-type: none"> Initiated Partial Hospitalization services | <ul style="list-style-type: none"> Added two QMHPs by contracting MSW and psychiatrist Two therapists shared with nearby MEIC | <ul style="list-style-type: none"> QMHP Executive Director more directly involved in case development, supervision and review Utilization Review plan established Psychiatrist will approve all treatment plans | | <ul style="list-style-type: none"> Added Partial Hospitalization services Emphasize daily living skills | <ul style="list-style-type: none"> Treatment plan more specific and detailed Progress notes more structured Developed discharge summary Medicare beneficiaries will be billed for co-insurance Developed collections policies and procedures | <ul style="list-style-type: none"> Referral agency notified |
| 44 | | <ul style="list-style-type: none"> More time required of psychiatrist | <ul style="list-style-type: none"> Psychiatrist involved in treatment plan development and approval Revised UR/QA plan | | | <ul style="list-style-type: none"> Treatment plan revised Progress notes revised Discharge summary revised More accounting and billing staff time required | <ul style="list-style-type: none"> Routine liaison with provider organizations in local area |
| 45 | | | <ul style="list-style-type: none"> Reactivate UR/QA plan Psychiatrist will approve all treatment plans and review all cases | | | | |

5. WAS THE QUALITY OF CARE AFFECTED BY THE DEMONSTRATION?
IF SO, HOW?

This section describes the effects of the demonstration in terms of quality of care issues. In any demonstration involving the expansion of the types of providers qualified to receive reimbursement under Medicare, quality of care is always a concern. The focus of the concern is that the quality of the care rendered beneficiaries under demonstration conditions be on a par, at least, with the quality of care prior to the demonstration.

Traditionally, quality of medical care assessments have fallen into one of three types of measures: structure, process, or outcome. The structure refers to adequate resources (e.g., adequate staff as determined through certification and licensing procedures) for providing care; the process refers to appropriate diagnoses and treatments; and the outcome refers to improved health for the individual. The structure considerations are usually dealt with by credential committees. Process and outcome measures are dealt with by peer review activities and clinical assessments. Unfortunately, quality of care assessments in the mental health field are by no means refined. In fact, there are virtually no quality of care standards that relate to mental health treatment. For the most part, then, this forces the use of gross proxy measures of quality of care.

Given the state of the art of quality of care assessment in the mental health field, there was little basis upon which to hypothesize that the quality of mental health care provided in all settings to beneficiaries participating in the demonstration would increase or decrease as a result of the demonstration waivers. However, it is important to document any observed changes in quality, by whatever measure, and to attempt to establish causal links to the demonstration waivers. Accordingly, this section is organized into three parts:

- . Differences in the termination status of the sites' beneficiary caseloads from the pre-waiver to the post-waiver period
- . Structure and process quality of care considerations
- . Summary of findings

(1) Were There Differences In The Termination Status Of The Sites'
Beneficiary Caseloads From The Pre-Waiver To The Post-Waiver Period?

This part describes selected characteristics of the Medicare beneficiary population treated at demonstration facilities in the baseline period and the demonstration period. Included are statistical descriptions of the following characteristics: termination status, reason for unplanned termination, treatment outcome, and referral at termination. Pre-demonstration/post-demonstration differences in these characteristics are examined. The analysis of termination characteristics reflect data on 580 Medicare beneficiaries who entered treatment prior to April 15, 1981, and 3,295 afterward. In total, termination characteristics for 3,875 beneficiaries are presented. The small n's for the baseline period should make any comparisons between the baseline and demonstration period cautionary.

It should be noted that discharge summaries were not required and, in general, not available prior to the demonstration. Consequently, Macro data collection staff needed to, in many instances, impute termination characteristics data elements from progress notes, correspondence, and other portions of the clinical record. As such, there is not necessarily one-to-one comparability of reported data between the two time periods. In addition, although a beneficiary may not have been seen in treatment for a long period of time, the case may not have been formally closed. The data below only reflect the formally closed cases and may, therefore, over- or understate the findings presented.

Termination Status

Exhibit 103 shows the distribution of Medicare beneficiaries served in demonstration facilities in the pre- and post-waiver periods by termination status and age. Highlights of the findings follow:

Baseline Period--The majority (61 percent) of beneficiaries under age 65 had unplanned terminations, except in AMHCs (50 percent). The majority (56 percent) of beneficiaries 65 and over had planned terminations.

- . Demonstration Period--The majority (56 percent) of beneficiaries under age 65 had unplanned terminations, except in AMHCs (47 percent). The majority (61 percent) of beneficiaries 65 and over had planned terminations, except in PHPs (44 percent) and CMHC-PHs (42 percent).
- . The pre- and post-waiver distributions of termination status were significantly different for all facilities (p less than .01), CMHC-OPs (p less than .01), and CMHC-PHs (p less than .05). With respect to the first two, there was a significant increase in planned terminations. Regarding the latter, there was a significant increase in unplanned terminations. There was a significant increase in planned terminations for beneficiaries 65 and over in CMHC-OPs (p less than .01) and in unplanned terminations for beneficiaries 65 and over in CMHC-PHs (p less than .01).

Exhibit 104 shows the distribution of Medicare beneficiaries served in demonstration facilities in the pre- and post-waiver periods by termination status and previous mental health treatment status. Highlights of the findings follow:

- . Baseline Period--One-half of beneficiaries with no previous mental health treatment had planned terminations. Except for CMHC-PHs and AMHCs, the majority of beneficiaries with some previous mental health treatment had unplanned terminations.
- . Demonstration Period--The majority (62 percent) of beneficiaries with no previous mental health treatment had planned terminations. The majority (52 percent) of beneficiaries with some previous mental health treatment had unplanned terminations.
- . During the demonstration period, there was a significant increase (p less than .01) in the proportion of beneficiaries with no previous mental health treatment who had planned terminations. There was not a significant difference between the pre- and post-waiver proportions for beneficiaries with previous treatment.

Reasons For Unplanned Terminations

Exhibit 105 shows the distribution of Medicare beneficiaries served in demonstration facilities in the pre- and post-waiver periods by reason for unplanned termination and age. Highlights of the findings follow:

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- . Baseline Period--The vast majority (79 percent) of beneficiaries under age 65 and majority (59 percent) of beneficiaries 65 and over simply decided to stop services as their reason for an unplanned termination. Twelve percent under age 65 and 24 percent 65 and over died.
- . Demonstration Period--The majority (73 percent) of beneficiaries under age 65 decided to stop treatment; 12 percent moved. The majority (60 percent) of beneficiaries 65 and over decided to stop treatment; 24 percent died.
- . There was a significant increase from the baseline to demonstration periods in the proportion of beneficiaries under age 65 who terminated treatment because they moved (p less than .01) and a significant decrease in the proportion of beneficiaries 65 and over in CMHC-OPs who terminated treatment because they died (p less than .01).

Exhibit 106 shows the distribution of Medicare beneficiaries served in demonstration facilities in the pre- and post-waiver periods by reason for unplanned termination and previous mental health treatment history. Highlights of the findings follow:

- . Baseline Period--The majority of beneficiaries with no previous treatment (65 percent) and with some type of previous treatment (71 percent) decided to stop services. Less than one-half of AMHC beneficiaries with no or with some previous treatment decided to stop services.
- . Demonstration Period--The majority of beneficiaries with no previous treatment (65 percent) and with some type of previous treatment (66 percent) decided to stop services.
- . For beneficiaries with previous mental health treatment in CMHC-OPs, there was a significant increase from the pre- to post-waiver periods in beneficiaries whose unplanned terminations were due to moving and a significant decrease due to death (p less than .001).

Treatment Outcome

Exhibit 107 shows the distribution of Medicare beneficiaries served in demonstration facilities in the pre- and post-waiver periods by treatment outcome and age. Highlights of the findings follow:

- . Baseline Period--The majority (50 percent) of beneficiaries aged 65 and over were considered improved upon termination; the modal value for under age 65 was no change, although the majority of AMHC beneficiaries were considered improved. The majority of elderly beneficiaries in AMHCs and PHPs were considered improved upon termination.
- . Demonstration Period--The modal value for beneficiaries under age 65 was no change (42 percent). The modal value for beneficiaries 65 and over was improved (40 percent).
- . For beneficiaries 65 and over, there was a significant decrease between the baseline and demonstration periods in the proportion of AMHC and PHP beneficiaries who were considered improved upon termination (p less than .05). For beneficiaries under age 65, there was a significant decrease between the baseline and demonstration periods in the proportion of CMHC-OP (p less than .001) and AMHC (p .05) beneficiaries who were considered improved upon termination.

Exhibit 108 shows the distribution of Medicare beneficiaries served in demonstration facilities in the pre- and post-waiver periods by treatment outcome and previous treatment status. Highlights of the findings follow:

- . Baseline Period--The modal value for beneficiaries with no previous treatment was improved (46 percent); the majority of AMHC beneficiaries improved (59 percent) and the majority of PHP beneficiaries showed no change (60 percent). The modal value for beneficiaries with some previous mental health treatment was improved (44 percent); the majority of AMHC beneficiaries improved (59 percent).
- . Demonstration Period--The modal value for beneficiaries with no previous treatment was improved (42 percent). The modal value for beneficiaries with some previous mental health treatment was no change (40 percent); more than one-half of PHP beneficiaries showed no change upon termination.
- . Only CMHC-OPs (p less than .001) and AMHCs (p less than .01) resulted in a significant difference in the distribution of treatment outcome between the baseline and demonstration periods, with a decrease in the percentage improved and an increase in the no change status. This was true overall and for beneficiaries with previous mental health treatment, but not for beneficiaries with no previous mental health treatment.

Referral

Exhibit 109 shows the distribution of Medicare beneficiaries in demonstration facilities in the pre- and post-waiver periods by referral upon termination. Highlights of the findings follow:

- . Baseline Period--Except for CMHC-PH beneficiaries, the majority of beneficiaries were terminated without any planned referral. A large proportion of CMHC-PH beneficiaries were referred to intermediate care facilities upon termination (19 percent).
- . Demonstration Period--Except for CMHC-PH and PHP beneficiaries, the majority of beneficiaries were terminated without any planned referral. Substantial proportions of CMHC-PH beneficiaries were referred to other mental health centers/clinics, skilled nursing facilities, or "other" referral sources.
- . The proportion of referrals to skilled nursing facilities, and other mental health centers/clinics increased significantly (p less than .05) between the baseline and demonstration periods.

(2) Structure And Process Quality Of Care Considerations

We noted in the beginning of this section that quality of medical care assessments have entailed, traditionally, structure, process and outcome measures. The previous part of this section dealt with the outcome measure. This part describes structure and process measures with respect to quality of care effects of the demonstration.

In Section 4 of this chapter--How Were The Characteristics Of Participating Sites Affected By The Demonstration--we presented information of direct relevance to quality of care assessment from structure and process measurement perspectives. Noteworthy are the following:

- . One-half (20) of the facilities participating in the demonstration added QMHPs as a direct result of the MMHD. Twelve more facilities reported shifting staff responsibilities to accommodate QMHP supervision requirements--responsibilities performed by non-QMHPs prior to the demonstration. For example, eleven facilities reported that QMHPs were either added or shifted to provide off-site services to beneficiaries.

- . One-half (20) of the facilities reported an increase in the time of their staff or consulting psychiatrists in reviewing records, providing consultation, or providing direct service to beneficiaries. Thirty-one facilities reported that their staff or consulting psychiatrist was newly responsible for review and sign-off of treatment plan activities.
- . Twenty-five facilities reported that utilization review/quality assurance plans were established or changed significantly as a direct result of the demonstration.
- . The majority of facilities reported significant changes in clinical recordkeeping. Twenty-six facilities reported that the addition or expansion of a treatment plan as defined by the demonstration was of significant importance; 18 facilities reported adding or significantly expanding the drug use profile; 17 facilities reported adding or significantly expanding progress notes; and 20 facilities reported adding or significantly expanding the discharge summary.

(3) Summary

The analysis of beneficiary termination data pertaining to the outcome dimension of quality of care show that, in general, beneficiaries fared no worse under demonstration conditions than prior to the demonstration, regarding termination status, reasons for unplanned termination, treatment outcome (gross clinical impression at termination), and referral measures. In reviewing these data, it should be noted that the number of cases terminated is so small (particularly during the Baseline Period) that the proportional distributions were subject to relatively small changes in individual cells. In addition, the number of cases in which treatment outcome could not be imputed was considerable in both the Baseline (14 percent) and Demonstration (19 percent) Periods, so that findings may be somewhat spurious.

The analysis of the structure and process dimensions of quality of care show the demonstrable effects of the MMHD on these dimensions. Staffing, physician supervision, utilization review/quality assurance, and clinical recordkeeping effects of the demonstration were particularly noteworthy.

HHS, Office of the Secretary
TERMINATION STATUS (AT TERMINATION) BY
FACILITY TYPE, BY BENEFICIARY AGE--
BASELINE AND DEMONSTRATION

| Termination Status | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---------------------------------|-----------------|---------------------------|---------------------------|-------------|------------|----------------------|---------------------------|---------------------------|-------------|------------|
| | <u>ALL</u> | <u>CMHC-</u> <u>OP</u> | <u>CMHC-</u> <u>PH</u> | <u>AMHC</u> | <u>PHP</u> | <u>ALL</u> | <u>CMHC-</u> <u>OP</u> | <u>CMHC-</u> <u>PH</u> | <u>AMHC</u> | <u>PHP</u> |
| All Beneficiaries | | | | | | | | | | |
| Number of Cases | 580 | 331 | 37 | 128 | 84 | 3,295 | 1,292 | 171 | 1,472 | 360 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Unplanned Termination | 52.1 | 55.9 | 37.8 | 43.0 | 57.1 | 46.2 | 47.5 | 57.9 | 39.7 | 62.2 |
| Planned Termination | 47.9 | 44.1 | 62.2 | 57.0 | 42.9 | 53.8 | 52.5 | 42.1 | 60.3 | 37.8 |
| Chi-square test of independence | | | | | | ** | ** | * | NS | NS |
| Beneficiaries Under Age 65 | | | | | | | | | | |
| Number of Cases | 265 | 148 | 17 | 28 | 72 | 1,356 | 617 | 80 | 418 | 241 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Unplanned Termination | 61.0 | 62.2 | 64.7 | 50.0 | 62.5 | 55.8 | 57.7 | 58.8 | 46.9 | 65.1 |
| Planned Termination | 39.0 | 37.8 | 35.3 | 50.0 | 37.5 | 44.2 | 42.3 | 41.3 | 53.1 | 34.9 |
| Chi-square test of independence | | | | | | NS | NS | NS | NS | NS |
| Beneficiaries Age 65 and Over | | | | | | | | | | |
| Number of Cases | 315 | 183 | 20 | 100 | 12 | 1,939 | 675 | 91 | 1,054 | 119 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Unplanned Termination | 44.4 | 50.8 | 15.0 | 41.0 | 25.0 | 39.5 | 38.2 | 57.1 | 36.8 | 56.3 |
| Planned Termination | 55.6 | 49.2 | 85.0 | 59.0 | 75.0 | 60.5 | 61.8 | 42.9 | 63.2 | 43.7 |
| Chi-square test of independence | | | | | | NS | ** | ** | NS | NS |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary

TERMINATION STATUS (AT TERMINATION) BY
FACILITY TYPE, BY PREVIOUS TREATMENT STATUS---
BASELINE AND DEMONSTRATION

| Termination Status | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---|-----------------|-------------|-------------|--------|--------|----------------------|-------------|-------------|--------|--------|
| | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP |
| <u>All Beneficiaries</u> | | | | | | | | | | |
| Number of Cases | 577 | 331 | 36 | 126 | 84 | 3,258 | 1,276 | 168 | 1,456 | 358 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Unplanned Termination | 52.2 | 55.9 | 38.9 | 42.9 | 57.1 | 46.3 | 48.0 | 58.3 | 39.7 | 62.0 |
| Planned Termination | 47.8 | 44.1 | 61.1 | 57.1 | 42.9 | 53.7 | 52.0 | 41.7 | 60.3 | 38.0 |
| Chi-square test of independence | | | | | | * | * | NS | NS | NS |
| <u>Beneficiaries With No Previous Mental Health Treatment</u> | | | | | | | | | | |
| Number of Cases | 139 | 87 | 2 | 44 | 6 | 1,281 | 491 | 38 | 697 | 55 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Unplanned Termination | 50.0 | 57.5 | 0.0 | 38.6 | 50.0 | 38.3 | 38.3 | 57.9 | 36.2 | 52.7 |
| Planned Termination | 50.0 | 42.5 | 100.0 | 61.4 | 50.0 | 61.7 | 61.7 | 42.1 | 63.8 | 47.3 |
| Chi-square test of independence | | | | | | ** | ** | NS | NS | NS |
| <u>Beneficiaries With Previous Mental Health Treatment</u> | | | | | | | | | | |
| Number of Cases | 438 | 244 | 34 | 82 | 78 | 1,977 | 785 | 130 | 759 | 303 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Unplanned Termination | 52.7 | 55.3 | 41.2 | 45.1 | 57.7 | 51.5 | 54.0 | 58.5 | 43.0 | 63.7 |
| Planned Termination | 47.3 | 44.7 | 58.8 | 54.9 | 42.3 | 48.5 | 46.0 | 41.5 | 57.0 | 36.3 |
| Chi-square test of independence | | | | | | NS | NS | NS | NS | NS |

* p .05

** p .01

*** p .001

EXHIBIT 105

HHS, Office of the Secretary
 REASON FOR UNPLANNED TERMINATION BY
 FACILITY TYPE, BY BENEFICIARY AGE--
 BASELINE AND DEMONSTRATION

| Reason for Unplanned Termination | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|--|-----------------|-------------|-------------|--------|--------|----------------------|-------------|-------------|--------|--------|
| | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP |
| <u>All Beneficiaries</u> | | | | | | | | | | |
| Number of Cases | 287 | 181 | 12 | 47 | 47 | 1,446 | 578 | 94 | 558 | 216 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Moved | 5.2 | 1.7 | 0.0 | 21.3 | 4.1 | 10.8 | 10.2 | 10.6 | 12.7 | 7.4 |
| Died | 17.1 | 21.0 | 8.3 | 19.1 | 2.0 | 15.2 | 10.4 | 9.6 | 22.6 | 11.6 |
| Suicide | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.4 | 0.5 |
| Incarcerated | 0.7 | 0.6 | 0.0 | 0.0 | 2.0 | 0.7 | 1.4 | 1.1 | 0.2 | 0.0 |
| Decided to Stop Services | 69.7 | 71.3 | 91.7 | 48.9 | 75.5 | 65.9 | 73.9 | 74.5 | 55.6 | 67.6 |
| Other | 7.3 | 5.5 | 0.0 | 10.6 | 12.2 | 7.2 | 4.2 | 4.3 | 8.6 | 13.0 |
| Chi-square test of independence | | | | | | NS | *** | NS | NS | NS |
| <u>Beneficiaries Under Age 65</u> | | | | | | | | | | |
| Number of Cases | 155 | 89 | 9 | 12 | 45 | 720 | 336 | 44 | 187 | 153 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Moved | 2.5 | 1.1 | 0.0 | 8.3 | 4.4 | 11.7 | 9.8 | 15.9 | 16.0 | 9.2 |
| Died | 11.6 | 15.7 | 0.0 | 25.0 | 2.2 | 6.9 | 5.7 | 4.5 | 11.8 | 4.6 |
| Suicide | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 1.1 | 0.0 |
| Incarcerated | 1.3 | 1.1 | 0.0 | 0.0 | 2.2 | 1.1 | 2.4 | 0.0 | 0.0 | 0.0 |
| Decided to Stop Services | 78.7 | 78.7 | 100.0 | 58.3 | 80.0 | 72.3 | 76.8 | 72.7 | 63.6 | 73.9 |
| Other | 5.8 | 3.4 | 0.0 | 8.3 | 11.1 | 7.5 | 5.4 | 6.8 | 7.5 | 12.4 |
| Chi-square test of independence | | | | | | ** | ** | NS | NS | NS |
| <u>Beneficiaries Age 65 and Over</u> | | | | | | | | | | |
| Number of Cases | 132 | 92 | 3 | 35 | 2 | 726 | 242 | 50 | 371 | 63 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Moved | 8.3 | 2.2 | 0.0 | 25.7 | 0.0 | 9.9 | 10.7 | 6.0 | 11.1 | 3.2 |
| Died | 23.5 | 26.1 | 33.3 | 17.1 | 0.0 | 23.6 | 16.9 | 14.0 | 28.0 | 28.6 |
| Suicide | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 1.6 |
| Incarcerated | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 2.0 | 0.3 | 0.0 |
| Decided to Stop Services | 59.1 | 64.1 | 66.6 | 45.7 | 50.0 | 59.9 | 69.8 | 76.0 | 51.5 | 52.4 |
| Other | 9.1 | 7.6 | 0.0 | 11.4 | 50.0 | 6.9 | 2.5 | 2.0 | 9.2 | 14.3 |
| Chi-square test of independence | | | | | | NS | ** | NS | NS | NS |

* p < .05

** p < .01

*** p < .001

EXHIBIT 106

HHS, Office of the Secretary

REASON FOR UNPLANNED TERMINATION BY FACILITY
TYPE, BY PREVIOUS TREATMENT STATUS--
BASELINE AND DEMONSTRATION

| Reason for Unplanned Termination | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|---|-----------------|-------------|-------------|--------|--------|----------------------|-------------|-------------|--------|--------|
| | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP |
| <u>All Beneficiaries</u> | | | | | | | | | | |
| Number of Cases | 286 | 181 | 12 | 46 | 47 | 1,437 | 577 | 93 | 553 | 214 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Moved | 5.2 | 1.7 | 0.0 | 21.7 | 4.3 | 10.9 | 10.2 | 10.8 | 12.8 | 7.5 |
| Died | 17.1 | 21.0 | 8.3 | 19.6 | 2.1 | 15.2 | 10.4 | 9.7 | 22.8 | 11.2 |
| Suicide | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.4 | 0.5 |
| Incarcerated | 0.7 | 0.6 | 0.0 | 0.0 | 2.1 | 0.7 | 1.4 | 1.1 | 0.2 | 0.0 |
| Decided to Stop Services | 69.6 | 71.3 | 91.7 | 47.8 | 78.7 | 65.8 | 73.8 | 74.2 | 55.3 | 67.8 |
| Other | 7.3 | 5.5 | 0.0 | 10.9 | 12.8 | 7.2 | 4.2 | 4.3 | 8.5 | 13.1 |
| Chi-square test of independence | | | | | | NS | *** | NS | NS | NS |
| <u>Beneficiaries With No Previous Mental Health Treatment</u> | | | | | | | | | | |
| Number of Cases | 66 | 49 | 0 | 14 | 3 | 474 | 181 | 20 | 247 | 26 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Moved | 4.5 | 2.0 | 0.0 | 14.3 | 0.0 | 10.1 | 9.4 | 5.0 | 10.5 | 15.4 |
| Died | 16.7 | 16.3 | 0.0 | 14.3 | 33.3 | 20.3 | 14.4 | 10.0 | 25.9 | 15.4 |
| Suicide | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 3.8 |
| Incarcerated | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 5.0 | 0.0 | 0.0 |
| Decided to Stop Services | 65.2 | 71.4 | 0.0 | 50.0 | 33.3 | 65.4 | 74.0 | 80.0 | 58.3 | 61.5 |
| Other | 13.6 | 10.2 | 0.0 | 21.4 | 33.3 | 3.8 | 2.2 | 0.0 | 5.3 | 3.8 |
| Chi-square test of independence | | | | | | * | * | | NS | NS |
| <u>Beneficiaries With Previous Mental Health Treatment</u> | | | | | | | | | | |
| Number of Cases | 220 | 132 | 12 | 32 | 44 | 963 | 396 | 73 | 306 | 188 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Moved | 5.5 | 1.5 | 0.0 | 25.0 | 4.5 | 11.2 | 10.6 | 12.3 | 14.7 | 6.4 |
| Died | 17.3 | 22.7 | 8.3 | 21.9 | 0.0 | 12.8 | 8.6 | 9.6 | 20.3 | 10.6 |
| Suicide | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.7 | 0.0 |
| Incarcerated | 0.9 | 0.8 | 0.0 | 0.0 | 2.3 | 0.9 | 2.0 | 0.0 | 0.3 | 0.0 |
| Decided to Stop Services | 70.9 | 71.2 | 91.7 | 46.9 | 81.8 | 66.0 | 73.7 | 72.6 | 52.9 | 68.6 |
| Other | 5.5 | 3.8 | 0.0 | 6.3 | 11.4 | 8.8 | 5.1 | 5.5 | 11.1 | 14.4 |
| Chi-square test of independence | | | | | | * | *** | NS | NS | * |

* p < .05

** p < .01

*** p < .001

HHS, Office of the Secretary
TREATMENT OUTCOME (AT TERMINATION)
BY FACILITY TYPE, BY BENEFICIARY AGE--
BASELINE AND DEMONSTRATION

| Treatment Outcome | BASELINE PERIOD | | | | DEMONSTRATION PERIOD | | | | | |
|---------------------------------|-----------------|-------------|-------------|--------|----------------------|--------|-------------|-------------|--------|--------|
| | ALL | CMHC- OP | CMHC- PH | AMHC | PHP | ALL | CMHC- OP | CMHC- PH | AMHC | PHP |
| All Beneficiaries | | | | | | | | | | |
| Number of Cases | 461 | 248 | 31 | 114 | 68 | 3,070 | 1,163 | 152 | 1,417 | 338 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Improved | 44.7 | 42.3 | 35.5 | 58.8 | 33.8 | 35.6 | 32.0 | 22.4 | 42.4 | 25.1 |
| No Change | 38.2 | 39.5 | 45.2 | 29.8 | 44.1 | 40.1 | 35.9 | 34.2 | 41.4 | 51.8 |
| Regressed | 3.0 | 2.4 | 3.2 | 1.8 | 7.4 | 5.6 | 3.6 | 5.3 | 6.1 | 10.1 |
| Could Not Tell | 14.1 | 15.7 | 16.1 | 9.6 | 14.7 | 18.8 | 28.5 | 38.2 | 10.0 | 13.0 |
| Chi-square test of independence | | | | | | *** | *** | NS | ** | NS |
| Beneficiaries Under Age 65 | | | | | | | | | | |
| Number of Cases | 212 | 112 | 14 | 27 | 59 | 1,244 | 556 | 73 | 389 | 226 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Improved | 38.2 | 36.6 | 42.9 | 66.7 | 27.1 | 29.2 | 24.3 | 30.1 | 39.1 | 23.9 |
| No Change | 44.3 | 45.5 | 42.9 | 29.6 | 49.2 | 42.4 | 36.7 | 39.7 | 42.7 | 57.1 |
| Regressed | 3.3 | 1.8 | 0.0 | 3.7 | 6.8 | 5.2 | 3.2 | 8.2 | 5.9 | 8.0 |
| Could Not Tell | 14.2 | 16.1 | 14.3 | 0.0 | 16.9 | 23.2 | 35.8 | 21.9 | 12.3 | 11.1 |
| Chi-square test of independence | | | | | | ** | *** | NS | * | NS |
| Beneficiaries Age 65 and Over | | | | | | | | | | |
| Number of Cases | 249 | 136 | 17 | 87 | 9 | 1,826 | 607 | 79 | 1,028 | 112 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Improved | 50.2 | 47.1 | 29.4 | 56.3 | 77.8 | 39.9 | 39.0 | 15.2 | 43.7 | 27.7 |
| No Change | 32.9 | 34.6 | 47.1 | 29.9 | 11.1 | 38.5 | 35.1 | 29.1 | 41.0 | 41.1 |
| Regressed | 2.8 | 2.9 | 5.9 | 1.1 | 11.1 | 5.8 | 4.0 | 2.5 | 6.2 | 14.3 |
| Could Not Tell | 14.1 | 15.4 | 17.6 | 12.6 | 0.0 | 15.8 | 21.9 | 53.2 | 9.1 | 17.0 |
| Chi-square test of independence | | | | | | ** | NS | NS | * | * |

* p < .05

** p < .01

*** p < .001

BY PREVIOUS TREATMENT STATUS--
BASELINE AND DEMONSTRATION

| Treatment Outcome | BASELINE PERIOD | | | | | DEMONSTRATION PERIOD | | | | |
|--|-----------------|-------------|-------------|--------|--------|----------------------|-------------|-------------|--------|--------|
| | All | CMHC- OP | CMHC- PH | AMHC | PHP | All | CMHC- OP | CMHC- PH | AMHC | PHP |
| All Beneficiaries | | | | | | | | | | |
| Number of Cases | 459 | 248 | 31 | 112 | 69 | 3,040 | 1,153 | 150 | 1,401 | 336 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Improved | 44.7 | 42.3 | 35.5 | 58.9 | 33.3 | 35.6 | 31.9 | 22.7 | 42.5 | 25.3 |
| No Change | 38.3 | 39.5 | 45.2 | 30.4 | 43.5 | 40.2 | 35.9 | 34.7 | 41.6 | 51.8 |
| Regressed | 3.1 | 2.4 | 3.2 | 1.8 | 7.2 | 8.5 | 3.6 | 5.3 | 6.0 | 10.1 |
| Could Not Tell | 13.9 | 15.7 | 16.1 | 8.9 | 14.5 | 18.7 | 28.6 | 37.3 | 9.9 | 12.8 |
| Chi-square test of independence | | | | | | *** | *** | NS | ** | NS |
| Beneficiaries With No Previous Mental Health Treatment | | | | | | | | | | |
| Number of Cases | 114 | 67 | 3 | 39 | 5 | 1,211 | 442 | 35 | 681 | 53 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Improved | 45.6 | 38.8 | 33.3 | 59.0 | 40.0 | 41.9 | 39.1 | 22.9 | 45.2 | 35.8 |
| No Change | 43.0 | 44.8 | 66.7 | 35.9 | 60.0 | 41.0 | 40.0 | 31.4 | 42.4 | 35.8 |
| Regressed | 5.3 | 7.5 | 0.0 | 2.6 | 0.0 | 3.9 | 2.9 | 2.9 | 4.1 | 9.4 |
| Could Not Tell | 6.1 | 9.0 | 0.0 | 2.6 | 0.0 | 13.2 | 17.9 | 42.9 | 8.2 | 18.9 |
| Chi-square test of independence | | | | | | NS | NS | NS | NS | NS |
| Beneficiaries With Previous Mental Health Treatment | | | | | | | | | | |
| Number of Cases | 345 | 181 | 28 | 73 | 63 | 1,829 | 711 | 115 | 720 | 283 |
| Percent | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Improved | 44.3 | 43.6 | 35.7 | 58.9 | 33.3 | 31.4 | 27.4 | 22.6 | 39.9 | 23.3 |
| No Change | 36.8 | 37.6 | 42.9 | 27.4 | 42.9 | 39.7 | 33.3 | 35.7 | 40.8 | 54.8 |
| Regressed | 2.3 | 0.6 | 3.6 | 1.4 | 7.9 | 6.6 | 3.9 | 6.1 | 7.8 | 10.2 |
| Could Not Tell | 16.5 | 18.2 | 3.5 | 12.3 | 15.9 | 22.3 | 35.3 | 35.7 | 11.5 | 11.7 |
| Chi-square test of independence | | | | | | *** | *** | NS | ** | NS |

* p < .05

** p < .01

*** p < .001

EXHIBIT 109

IHS, Office of the Secretary
BENEFICIARY REFERRALS (AT TERMINATION) BY FACILITY TYPE--
BASELINE AND DEMONSTRATION

| Referral | BASELINE PERIOD | | | | DEMONSTRATION PERIOD | | | | | |
|---|-----------------|-------------|-------|-------|----------------------|-------|-------------|-------|-------|-------|
| | ALL | CMHC- OP | PH | AMBIC | MIP | ALL | CMHC- OP | PH | AMBIC | MIP |
| NUMBER OF CASES | 470 | 248 | 32 | 113 | 77 | 2,920 | 1,112 | 151 | 1,323 | 334 |
| No Planned Referral | 56.6% | 57.3% | 31.3% | 66.4% | 50.1% | 52.4% | 50.1% | 39.7% | 56.8% | 45.2% |
| Nonpsychiatric Physician Practice | 4.3 | 5.7 | 12.5 | 1.8 | 0.0 | 2.8 | 3.9 | 2.0 | 1.8 | 3.3 |
| Private Psychiatric Practice | 2.3 | 2.0 | 6.3 | 1.8 | 2.6 | 3.4 | 6.7 | 2.7 | 0.9 | 2.1 |
| Other Private Mental Health Practice | 1.5 | 2.4 | 0.0 | 0.0 | 1.3 | 0.7 | 0.3 | 3.3 | 0.4 | 2.4 |
| County Mental Hospital | 0.6 | 1.2 | 0.0 | 0.0 | 0.0 | 0.8 | 0.5 | 2.0 | 0.5 | 2.4 |
| State Mental Hospital | 4.5 | 3.6 | 6.3 | 3.5 | 7.8 | 4.6 | 4.1 | 2.0 | 4.9 | 6.0 |
| Veterans Administration Hospital | 1.5 | 2.0 | 0.0 | 1.8 | 0.0 | 0.8 | 1.0 | 0.7 | 0.6 | 0.9 |
| Private Mental Hospital | 0.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.6 | 0.2 | 4.0 | 0.5 | 0.9 |
| Other Mental Health Center/Clinic | 4.9 | 4.4 | 6.3 | 1.8 | 10.4 | 7.4 | 7.6 | 11.3 | 5.6 | 12.3 |
| Skilled Nursing Facility | 8.7 | 9.3 | 9.4 | 13.3 | 0.0 | 12.6 | 10.9 | 10.6 | 15.9 | 6.6 |
| Intermediate Care Facility | 3.2 | 3.6 | 18.8 | 0.0 | 0.0 | 2.5 | 1.3 | 0.7 | 4.3 | 0.6 |
| Other Unspecified Long-Term Care Facility | 0.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 | 0.0 | 0.3 | 0.9 |
| Other Hospital | 3.0 | 1.2 | 3.1 | 4.4 | 6.5 | 4.7 | 9.5 | 2.7 | 1.4 | 2.7 |
| Other | 10.2 | 8.5 | 6.3 | 6.2 | 23.4 | 8.7 | 7.3 | 18.5 | 7.0 | 15.6 |
| Chi-square test of independence | | | | | | * | *** | *** | NS | NS |

* p < .05

** p < .01

*** p < .001

V. COMPARISON GROUP/DEMONSTRATION GROUP ANALYSIS

V. COMPARISON GROUP/DEMONSTRATION GROUP ANALYSIS

Chapter II described the limitations of the demonstration design, evaluation methodology, and evaluation database, posing a number of threats to the internal validity of the results of the demonstration. In considering strategies and techniques to address these threats, it was determined that selection of a sample of comparison group sites, matched as closely as possible to demonstration sites, would serve best to control for demonstration effects. This chapter presents criteria for selection of the comparison group members, describes the selection process and the resultant comparison group sample, describes the comparison group data collection effort, and presents the comparison group/demonstration group analysis.

1. COMPARISON GROUP SELECTION CRITERIA AND SELECTION PROCESS

With a goal of matching as closely as possible to salient characteristics of demonstration group members, the development of selection criteria sought to identify those characteristics. The first criterion (characteristic) chosen was that a comparison group member should be from the same State as a demonstration group member, ensuring homogeneity of such factors as facility and staff licensing requirements, third-party reimbursement environment, mental health laws, and confidentiality requirements.

The second criterion chosen was that a comparison group member should be approximately the same "size" as a demonstration group member, so as not to skew either demonstration or comparison group results. "Size" was operationally defined as "total expenditures" and "total number of full-time staff." The third criterion chosen was that a comparison group member should meet the following basic requirements of the demonstration to assure some programmatic comparability among group members:

- . The facility could not be hospital-based.
- . Community mental health centers had to have been federally supported, providing at least the five initial services required by Public Law 94-63.
- . The other two categories of programs (ambulatory mental health clinics and partial hospitalization programs) had to meet the site physician supervision standards of Public Law 95-210, the Rural Health Clinics Act.
- . The facility had to be licensed by the State, if licensing was required.
- . The partial hospitalization programs could not have an ambulatory treatment component, and, conversely, AMHCs could not have a partial hospitalization component.

The fourth criterion was that a comparison group member had to serve a high percentage of Medicare beneficiaries compared to other such facilities constituting the universe in each category but a number comparable to a demonstration group member. Operationally, this meant matching on the basis of either the number of elderly served by CMHCs (additions 65 and over) or the number of clients served by AMHCs or partial hospitalization programs (total outpatient or partial hospitalization additions). The last criterion was that a comparison group member should be billing for and receiving some reimbursement from Medicare.

Having chosen criteria for comparison group selection, data tapes were requested from NIMH with information supporting each criterion. NIMH provided the database for the 1980 Inventories of Outpatient Clinics and Day/Night Treatment Facilities and Community Mental Health Centers. From the database, data corresponding to the criteria were developed. Prior to selection of specific sites, however, it was decided that a single comparison group member could be matched against more than one demonstration group member in a given State, e.g., one comparison group CMHC matched to three CMHCs in a given State. This was made necessary by the fact that the comparison group was originally only to be composed of CMHCs and AMHCs because it was thought that the universe of partial hospitalization programs had been selected for

participation in the demonstration. When it was determined that NIMH had only a partial listing of these latter facilities, it became necessary to expand the comparison group to include partial hospitalization facilities. Accordingly, sites could not be matched necessarily on a one-to-one basis because of the contractual limitation of a maximum of 30 members in the comparison group.

Using the criteria and the outputted data, comparison group members offering the closest "fit" to demonstration group members were identified, all salient characteristics being taken into account. Exhibit 110 shows the facilities identified and agreeing to participate, and the facilities to which they are matched. It should be noted that a comparison group member was not selected for an AMHC in Texas, which dropped out of the demonstration and was not replaced, and for four partial programs for which there were not other known partial programs in the respective States. In addition, with a CMHC in Alabama, a PHP in Pennsylvania, an AMHC in Oklahoma, and an AMHC in Missouri declining participation in the demonstration, no comparison group members were selected.

Comparison group members were contacted initially by Macro by letter, to explain the demonstration and its evaluation and the role and responsibilities of comparison group members and to elicit their cooperation. Each comparison group member was contacted by Macro by telephone shortly thereafter to answer any questions and to attempt to firm up the facility's participation. Facilities declining participation were contacted by letter once again, over the signature of the co-Project Officers for the evaluation, and then contacted by telephone by them. No effort was made to "replace" comparison group facilities declining to participate because additional facilities could not be well matched with demonstration facilities on the selection parameters.

Facilities agreeing to participate as comparison group members formalized their involvement by completing a "Comparison Study Site Memorandum of Understanding."

After the nearly one-year selection process, 17 facilities formally agreed to participate as comparison facilities.

EXHIBIT 110

HHS, Office of the Secretary

COMPARISON GROUP SITES

| Demonstration Facility | Comparison Facility Location |
|---|------------------------------|
| <u>Community Mental Health Centers</u> | |
| 01 | None |
| 02 | None |
| 09 | None |
| 04 | Comparison Facility 1 |
| 13 | Comparison Facility 1 |
| 03 | None |
| 07 | None |
| 12 | None |
| 05 | Comparison Facility 2 |
| 10 | Comparison Facility 2 |
| 06 | None |
| 08 | Comparison Facility 3 |
| 11 | Comparison Facility 4 |
| 14 | Comparison Facility 5 |
| <u>Outpatient Clinics</u> | |
| 16 | Comparison Facility 6 |
| 18 | None |
| 28 | Comparison Facility 7 |
| 20 | Comparison Facility 8 |
| 21 | Comparison Facility 9 |
| 17 | Comparison Facility 10 |
| 30 | Comparison Facility 10 |
| 26 | Comparison Facility 11 |
| 23 | Comparison Facility 12 |
| 24 | None |
| 27 | Comparison Facility 13 |
| 25 | Comparison Facility 14 |
| <u>Partial Hospitalization Programs</u> | |
| 33 | None |
| 35 | None |
| 44 | None |
| 31 | Comparison Facility 15 |
| 38 | Comparison Facility 15 |
| 32 | Comparison Facility 16 |
| 36 | None |
| 37 | None |
| 43 | None |
| 41 | Comparison Facility 17 |
| 39 | None |
| 40 | None |
| 42 | None |
| 45 | None |

Of the 17 facilities agreeing to participate as comparison group sites, there were 5 community mental health centers, 9 ambulatory mental health clinics, and 3 partial hospitalization programs.

Facilities declining participation as comparison group sites did so for a variety of reasons. However, the most frequent reasons cited were that the potential reimbursement (up to \$2,000 to complete requisite forms) would not cover the facility's cost for providing requisite information, confidentiality requirements, and time constraints.

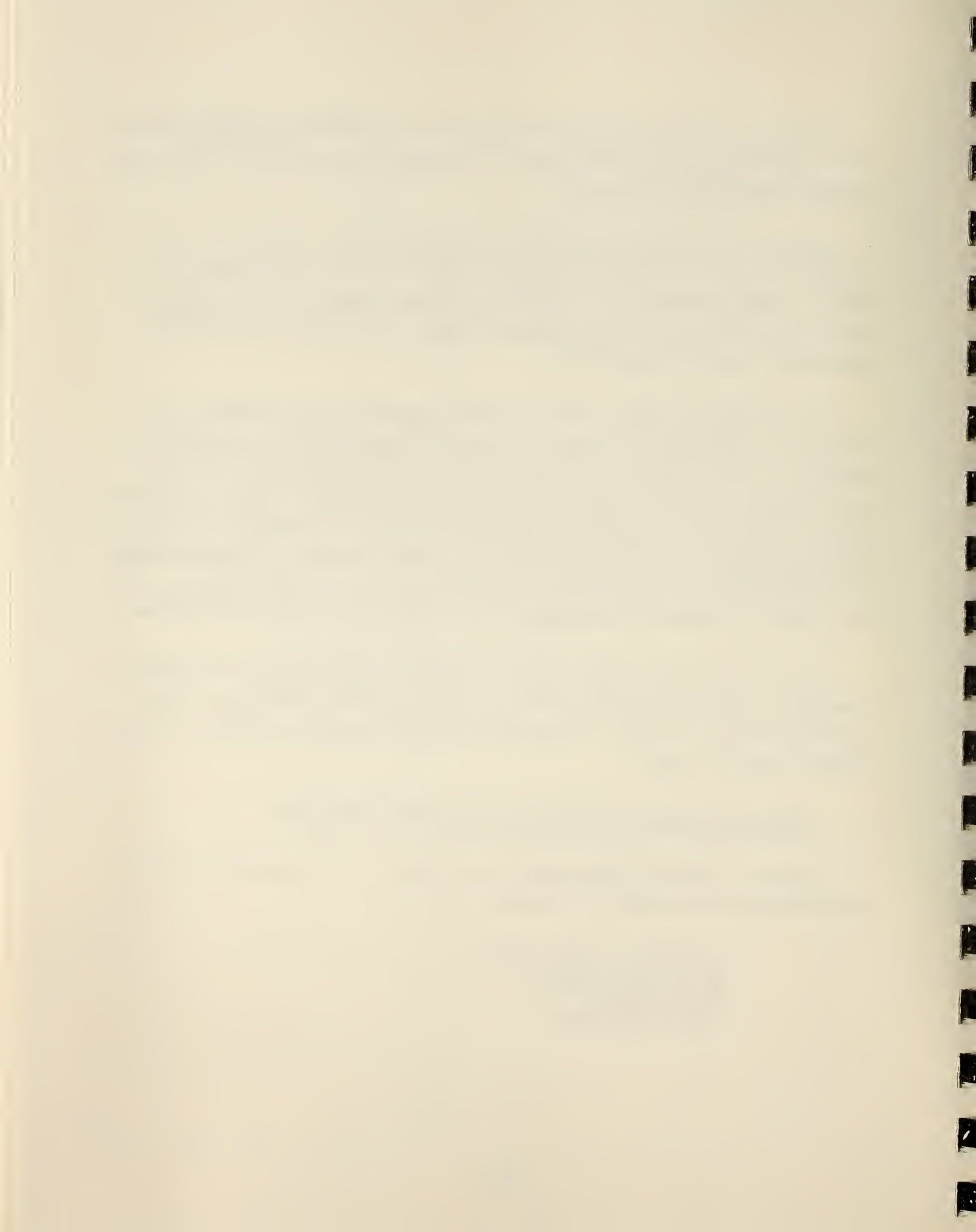
The evaluation design called for each comparison group member to be surveyed by mail every six months during the demonstration to determine the utilization of and charges for services by Medicare beneficiaries, and their characteristics, and any changes in comparison group member program operations. However, due to the extended timeframe to secure the participation of the comparison group, it was decided that these facilities would be surveyed initially for the time period corresponding to the first year of the demonstration, and then every six months corresponding to the second year of the demonstration.

Like demonstration group members, comparison group members completed a Beneficiary Clinical Abstracting Form for each Medicare beneficiary served, including services, charges, reimbursements and termination information, and a Program Interview Guide.

2. COMPARISON GROUP/DEMONSTRATION GROUP ANALYSIS

Separate sections below present a description of the comparison group/ demonstration group analysis, as follows:

- . Beneficiary characteristics
- . Services and charges
- . Quality of care
- . Program operations



Because the interest was in the representativeness of the demonstration sites and whether factors other than the demonstration may have driven the effects observed, more abbreviated analyses are presented than those shown in the previous chapter. In addition, a decision was made not to perform any statistical tests of significance between the two groups because of the large differences in the sample sizes of the two groups. In such a situation, almost any differences observed would be of statistical significance--a result that would be spurious for analytical purposes.

(1) Analysis Of Beneficiary Characteristics

Below, comparison group/demonstration group analyses are presented for the following beneficiary characteristics: age, sex, race, diagnosis, previous mental health treatment, and referral source.

Age

Exhibit 111 shows the distribution of Medicare beneficiaries served in comparison and demonstration facilities by age during the demonstration period. Highlights of the findings follow:

- . Comparison Group--More than one-half of the beneficiaries served in all facilities (62 percent), irrespective of facility type, were 65 years of age or over.
- . Demonstration Group--More than one-half of the beneficiaries served in all facilities (51 percent), and in AMHCs (67 percent) were 65 years of age or over. However, more than one-half of CMHC (56 percent) and PHP (78 percent) beneficiaries were under age 65.
- . The median ages of the comparison group (66.0 years) and the demonstration group (65.8 years) beneficiaries were comparable. However, the median age of PHP beneficiaries served in comparison facilities was substantially higher (66.1 years) than PHP beneficiaries served in demonstration facilities (47.5 years).

EXHIBIT 111

HHS, Office of the Secretary

BENEFICIARY AGE BY FACILITY TYPE--
BENEFICIARIES WITH SERVICES IN
COMPARISON AND DEMONSTRATION SITES

| AGE | COMPARISON SITES | | | | DEMONSTRATION PERIOD | | | |
|-----------------|------------------|-------------|-------------|------------|----------------------|-------------|-------------|------------|
| | <u>ALL</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> | <u>ALL</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> |
| NUMBER OF CASES | | | | | | | | |
| PERCENT | | | | | | | | |
| Under 21 | 1,003 | 175 | 717 | 111 | 9,260 | 4,744 | 3,622 | 894 |
| 21-40 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 41-50 | 0.2 | -- | 0.3 | -- | 0.4 | 0.4 | 0.1 | 0.6 |
| 51-60 | 23.0 | 16.6 | 24.4 | 24.3 | 19.5 | 22.8 | 10.8 | 36.7 |
| 61-64 | 9.4 | 7.4 | 9.9 | 9.0 | 10.5 | 12.0 | 6.5 | 19.0 |
| 65-70 | 11.1 | 14.3 | 10.3 | 10.8 | 11.8 | 13.2 | 9.1 | 15.8 |
| 71-80 | 4.9 | 4.6 | 5.0 | 4.5 | 6.6 | 7.2 | 6.0 | 5.6 |
| 81-90 | 14.6 | 12.0 | 15.8 | 10.8 | 19.6 | 19.5 | 22.5 | 8.4 |
| Over 90 | 22.0 | 27.4 | 21.2 | 18.9 | 23.0 | 19.1 | 31.4 | 10.3 |
| | 14.9 | 17.7 | 13.1 | 21.6 | 7.4 | 5.0 | 11.6 | 3.5 |
| | -- | -- | -- | -- | 1.2 | 0.9 | 1.9 | 0.2 |

Sex

Exhibit 112 shows the distribution of Medicare beneficiaries served in comparison and demonstration facilities by sex during the demonstration period. Highlights of the findings follow:

- . Comparison Group--The majority of beneficiaries served in all facilities (54 percent), irrespective of facility type, were female.
- . Demonstration Group--Except for PHPs (46 percent), the majority of beneficiaries in CMHCs (53 percent) and AMHCs (60 percent) were female.
- . The sex distribution of comparison group beneficiaries was similar to that for the demonstration group in the baseline period.

Race

Exhibit 113 shows the distribution of Medicare beneficiaries in comparison and demonstration facilities by race during the demonstration period. Highlights of the findings follow:

- . Comparison Group--The majority of beneficiaries served were white (81 percent); blacks comprised 39 percent of the CMHC beneficiaries and 14 percent of the AMHC beneficiaries.
- . Demonstration Group--The majority of beneficiaries served were white (80 percent), Blacks comprised 17 percent of all beneficiaries, Hispanics comprised 6 percent of CMHC beneficiaries.
- . The differences in the race distributions among facility type may be more a function of geography than the differential occurrence of mental illness in the racial subpopulations of Medicare beneficiaries.

Primary Diagnosis

Exhibit 114 shows the distribution of Medicare beneficiaries in comparison and demonstration facilities by primary diagnosis during the demonstration period. Highlights of the findings follow:

EXHIBIT 112

HHS, Office of the Secretary

BENEFICIARY SEX BY FACILITY TYPE BY AGE--
COMPARISON AND DEMONSTRATION SITES

| SEX | COMPARISON SITES | | | | DEMONSTRATION PERIOD | | | |
|-----------------|------------------|-------------|-------------|------------|----------------------|-------------|-------------|------------|
| | <u>ALL</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> | <u>ALL</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> |
| NUMBER OF CASES | 987 | 175 | 705 | 107 | 9,236 | 4,731 | 3,614 | 891 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Male | 45.9 | 47.4 | 45.8 | 43.9 | 44.8 | 46.6 | 40.1 | 53.6 |
| Female | 54.1 | 42.6 | 54.2 | 56.1 | 55.2 | 53.4 | 59.9 | 46.4 |

EXHIBIT 113

HHS, Office of the Secretary

BENEFICIARY RACE BY FACILITY TYPE BY AGE---
COMPARISON AND DEMONSTRATION SITES

| DIAGNOSIS | COMPARISON SITES | | | | DEMONSTRATION PERIOD | | | |
|--------------------------|------------------|-------|-------|-------|----------------------|-------|-------|-------|
| | ALL | CMHC | AMHC | PHP | ALL | CMHC | AMHC | PHP |
| NUMBER OF CASES | 974 | 173 | 694 | 107 | 8,091 | 4,243 | 3,037 | 820 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| White | 81.1 | 59.5 | 84.9 | 91.6 | 79.6 | 73.6 | 88.1 | 79.1 |
| Black | 18.0 | 39.3 | 14.4 | 6.5 | 16.61 | 19.8 | 11.1 | 20.4 |
| Asian | 0.2 | -- | -- | 1.9 | 0.4 | 0.7 | 0.1 | 0.1 |
| American Indian, Alaskan | -- | -- | -- | -- | 0.2 | 0.4 | 0.1 | 0.0 |
| Hispanic | 0.7 | 1.2 | 0.7 | -- | 3.1 | 5.5 | 0.6 | 0.4 |

HHS, Office of the Secretary

BENEFICIARY DIAGNOSIS BY FACILITY TYPE--
COMPARISON AND DEMONSTRATION SITES

| DIAGNOSIS | COMPARISON SITES | | | | DEMONSTRATION PERIOD | | | |
|--|------------------|-------|-------|-------|----------------------|-------|-------|-------|
| | ALL | CMHC | AMHC | PHP | ALL | CMHC | AMHC | PHP |
| NUMBER OF CASES | 980 | 172 | 702 | 106 | 8,943 | 4,565 | 3,544 | 834 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Organic Mental Disorders | 15.5 | 37.2 | 11.5 | 6.6 | 15.1 | 13.4 | 18.1 | 11.4 |
| Substance Use Disorders | 1.3 | -- | 1.9 | -- | 3.9 | 4.4 | 4.0 | 0.8 |
| Schizophrenic Disorders | 32.8 | 32.6 | 31.9 | 38.7 | 29.2 | 33.8 | 17.7 | 54.4 |
| Paranoid and Other Psychotic Disorders | 2.1 | 4.1 | 1.9 | 0.9 | 2.2 | 2.1 | 1.9 | 1.6 |
| Affective Disorders | 12.2 | 8.7 | 13.5 | 9.4 | 14.5 | 15.7 | 13.5 | 12.2 |
| Anxiety, Somatoform, and Dissociative Disorders | 10.8 | 9.3 | 12.8 | -- | 13.6 | 15.0 | 13.0 | 7.6 |
| Adjustment Disorders | 13.4 | 2.9 | 11.4 | 43.4 | 12.4 | 6.4 | 21.7 | 5.9 |
| Disorders Usually First Evident in Infancy, Childhood, or Adolescence | 7.3 | 2.3 | 9.7 | -- | 6.0 | 6.1 | 6.3 | 4.9 |
| Other Disorders | 0.9 | 1.2 | 0.9 | 0.9 | 1.0 | 0.9 | 1.2 | 0.6 |
| Conditions Not Attributable to a Mental Disorder or Diagnosis Deferred | 3.6 | 1.7 | 4.6 | -- | 2.1 | 2.2 | 2.5 | 0.6 |

- . Comparison Group--Approximately one-third of the beneficiaries served were diagnosed as having some schizophrenic disorder. Schizophrenic disorders and organic mental disorders accounted for almost one-half of the diagnoses. Adjustment disorders accounted for 43 percent of the diagnoses among beneficiaries served in PHPs.
- . Demonstration Group--Less than one-third of the beneficiaries served (20 percent) were diagnosed as having some schizophrenic disorder. Almost one-half of beneficiaries served in CMHCs were diagnosed as having a schizophrenic or affective disorder. The majority of beneficiaries served in AMHCs were diagnosed as having adjustment, organic mental, or schizophrenic disorders. More than one-half (54 percent) of beneficiaries served in PHPs were diagnosed as having a schizophrenic disorder.
- . There were substantial differences in the diagnostic distributions by facility type, yet, the overall (across facility) distributions were quite similar.

Previous Mental Health Treatment

Exhibit 115 shows the distribution of Medicare beneficiaries in comparison and demonstration facilities by previous mental health treatment status. Highlights of the findings follow:

- . Comparison Group--Approximately 80 percent of the beneficiaries served had some type of previous mental health treatment. Of those who had previous mental health treatment, 25 percent had been treated in a State mental hospital; only 7 percent of PHP beneficiaries had previous treatment in a State mental hospital. Among this latter group, the majority of referrals were from private practitioners.
- . Demonstration Group--Approximately two-thirds of the beneficiaries served had some type of previous mental health treatment. Of those who had previous treatment, more than one-half had previous treatment in a State mental hospital or a general hospital psychiatric unit. Beneficiaries served in AMHCs had substantially less treatment in inpatient facilities than either CMHC or PHP beneficiaries.
- . The previous mental health treatment distribution of comparison group beneficiaries was similar to that for the demonstration group in the baseline period.

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES WITH SPECIFIC
TYPES OF PREVIOUS MENTAL HEALTH
TREATMENT BY FACILITY TYPE---
COMPARISON AND DEMONSTRATION SITES

| PREVIOUS MENTAL HEALTH TREATMENT | COMPARISON SITES | | | | DEMONSTRATION PERIOD | | | |
|------------------------------------|------------------|-------|-------|-------|----------------------|-------|-------|-------|
| | ALL | CMHC | AMHC | PHP | ALL | CMHC | AMHC | PHP |
| NUMBER OF CASES | 1,214 | 189 | 835 | 190 | 7,568 | 3,888 | 6,787 | 781 |
| None | 20.8 | 22.2 | 23.8 | 5.8 | 34.4 | 29.4 | 37.9 | 12.3 |
| Nonpsychiatric Physician Practice | 8.8 | 4.2 | 3.1 | 38.4 | 1.1 | 1.2 | 0.5 | 0.1 |
| County Mental Hospital | 7.3 | 0.5 | 7.5 | 13.2 | 5.9 | 4.4 | 0.8 | 11.4 |
| State Mental Hospital | 25.4 | 30.2 | 28.4 | 7.4 | 37.3 | 38.2 | 14.5 | 46.0 |
| VA Hospital | 1.0 | --- | 1.3 | 0.5 | 2.5 | 0.1 | 0.7 | 4.5 |
| Private Mental Hospital | 1.0 | 1.1 | 1.1 | 0.5 | 2.9 | 2.0 | 0.9 | 10.4 |
| Private Psychiatric Practice | 5.2 | 10.0 | 5.0 | 1.1 | 5.5 | 2.0 | 0.9 | 10.4 |
| Other Private Mental Health Center | 2.0 | 2.6 | 2.2 | 0.5 | 0.8 | 0.8 | .2 | 1.3 |
| Other Mental Health Center | 9.2 | 13.8 | 7.8 | 11.0 | 16.5 | 14.9 | 4.7 | 33.9 |
| General Hospital Psychiatric Unit | 11.4 | 12.2 | 11.5 | 10.0 | 21.5 | 28.1 | 4.7 | 27.4 |
| Other Hospitals | 2.1 | 2.1 | 2.4 | 1.1 | 2.6 | 2.7 | 0.3 | 8.6 |
| Other | 5.8 | 1.1 | 5.9 | 10.5 | 2.0 | 1.9 | 0.8 | 3.3 |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Referral Source

Exhibit 116 shows the distribution of Medicare beneficiaries in comparison and demonstration facilities by referral source. Highlights of the findings follow:

- . Comparison Group--Twenty-two percent of the referrals among all beneficiaries were from State mental hospitals, and referrals from family and friends, social service agencies, and self-referrals accounted for another 50 percent skilled nursing facilities (31 percent), State mental hospitals (22 percent), and social service agencies (49 percent) referrals were the modal values for CMHCs, AMHCs, and PHPs, respectively.
- . Demonstration Group--Twenty-nine percent of the referrals among all beneficiaries were family and friends, and self-referrals, social service agency referrals, and State mental hospital referrals accounted for another 45 percent. Family and friends referrals (32 percent), self-referrals (22 percent), and other mental health center referrals (18 percent) were the modal values for CMHCs, AMHCs, and PHPs, respectively.
- . The referral source distribution of comparison group beneficiaries was similar to that for the demonstration group in the baseline period.

Summary

The analysis of beneficiary characteristics, particularly diagnosis, previous mental health treatment and referral source, shows a similarity between the comparison group and demonstration group in the baseline period. This is to be expected without an incentive to attract a new population for services, as shown for the demonstration facilities in the demonstration period. The findings from the analysis of age and race variables may be due more to geography and differences in overall general population characteristics.

(2) Analysis Of Services And Charges

Below, comparison group/demonstration group analyses are presented for services utilization and charges. Like the analysis of services and charges, statistical tests of significance were not performed.

HHS, Office of the Secretary

PERCENT OF BENEFICIARIES REFERRED
FROM VARIOUS SOURCES OF FACILITY TYPE--
COMPARISON AND DEMONSTRATION SITES

| REFERRAL SOURCE | COMPARISON SITES | | | | DEMONSTRATION PERIOD | | | |
|----------------------------------|------------------|------|------|------|----------------------|-------|-------|------|
| | ALL | CMHC | AMHC | PHP | ALL | CMHC | AMHC | PHP |
| NUMBER OF CASES | 863 | 167 | 688 | 102 | 8,114 | 4,129 | 3,189 | 796 |
| Family, Friends | 19.8 | 8.4 | 21.5 | 8.8 | 29.1 | 32.3 | 20.9 | 5.8 |
| Self | 13.1 | 8.4 | 14.2 | 1.0 | 22.8 | 25.8 | 21.5 | 11.7 |
| Social Service Agency | 17.5 | 6.6 | 13.1 | 49.0 | 11.4 | 10.7 | 12.3 | 11.4 |
| Court, Lawyer | 2.4 | 4.2 | 2.0 | -- | 4.6 | 7.4 | 2.2 | 0.5 |
| Clergy | 0.1 | -- | 0.1 | -- | 0.6 | 0.6 | 1.0 | 0.3 |
| Nonpsychiatric Physician | 5.9 | 2.4 | 6.7 | 1.0 | 7.2 | 8.8 | 5.3 | 6.0 |
| Private Psychiatrist | 3.2 | 1.2 | 2.8 | 6.9 | 2.1 | 3.0 | 9.0 | 2.5 |
| Other Mental Health Practitioner | 0.7 | 0.6 | 0.7 | -- | 0.8 | 1.3 | 0.3 | 0.8 |
| County Mental Hospital | 7.0 | -- | 7.6 | 7.8 | 5.9 | 1.8 | 0.4 | 0.8 |
| State Mental Hospital | 22.2 | 21.6 | 21.7 | 6.9 | 10.6 | 9.6 | 11.7 | 11.9 |
| VA Hospital | 0.5 | -- | 0.4 | 1.0 | 0.8 | 3.7 | 0.3 | 2.1 |
| Private Mental Hospital | 0.3 | -- | 0.4 | -- | 0.6 | 0.8 | 0.4 | 0.3 |
| Other Mental Health Center | 6.7 | 10.2 | 2.8 | 21.6 | 8.2 | 8.1 | 3.8 | 17.7 |
| Skilled Nursing Facility | 9.6 | 30.5 | 4.7 | -- | 7.1 | 4.7 | 3.2 | 1.6 |
| Intermediate Care Facility | 0.7 | -- | 0.9 | -- | 4.0 | 2.5 | 6.3 | 0.4 |
| Other Long-Term Facility | 1.2 | 4.2 | 0.4 | -- | 0.4 | 0.9 | 0.3 | 0.0 |
| Hospital | 3.2 | 2.4 | 3.2 | 2.0 | 6.2 | 8.6 | 3.6 | 10.9 |
| Other | 11.1 | 0.6 | 13.5 | 2.0 | 7.6 | 6.8 | 7.3 | 13.4 |

Services Utilization

Exhibit 117 shows the distribution of service encounters of Medicare beneficiaries served in comparison and demonstration facilities during the entire demonstration time period, by type of service. Highlights of the findings follow:

- . Comparison Group--The largest proportion (43 percent) of services used by beneficiaries was individual therapy. Thirty-four percent of CMHC beneficiary encounters and 25 percent of AMHC beneficiary encounters were for medication therapy; PHP beneficiaries had no individual or medication therapy.
- . Demonstration Group--Forty-eight percent of all beneficiaries had individual therapy; 64 percent of CMHC encounters were for individual and group therapy, 75 percent of AMHC encounters were, and 96 percent of PHP encounters were.
- . Although there were substantial differences in the types of services used by the two groups, these differences could be readily attributed to alternative therapeutic philosophies or practice styles. Overall, the average number of encounters per beneficiary were comparable although slightly higher (nearly three times higher in PHPs) in the comparison group, as shown below:

AVERAGE NUMBER OF ENCOUNTERS PER BENEFICIARY

| | <u>Comparison Group</u> | (Demo Period) <u>Demonstration Group</u> |
|------|-------------------------|---|
| All | 18.3 | 14.3 |
| CHMC | 15.8 | 14.6 |
| AMHC | 16.0 | 13.9 |
| PHP | 37.0 | 14.2 |

These averages show that the demonstration facilities did not abuse the demonstration financial incentives by fostering overutilization.

Exhibit 118 shows the distribution of service encounters of Medicare beneficiaries served in comparison and demonstration facilities during the entire demonstration time period, by type of provider. Highlights of the findings follow:

HHS, Office of the Secretary

DISTRIBUTION OF AMBULATORY SERVICE ENCOUNTERS BY
SERVICE TYPE, BY FACILITY TYPE--COMPARISON AND DEMONSTRATION
SITES ALL BENEFICIARIES

| Service Type | COMPARISON SITES | | | | DEMONSTRATION SITES | | | |
|---|------------------|-------------|-------------|------------|---------------------|-------------|-------------|------------|
| | <u>All</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> | <u>All</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> |
| NUMBER OF ENCOUNTERS | 18,312 | 2,761 | 11,466 | 4,105 | 132,158 | 69,305 | 50,177 | 12,676 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Individual Therapy | 42.7 | 42.9 | 57.0 | 0.6 | 47.7 | 38.2 | 60.4 | 49.5 |
| Group Therapy | 12.7 | 13.0 | 8.1 | 25.0 | 23.9 | 26.1 | 15.1 | 46.4 |
| Medical Therapy | 20.7 | 34.0 | 24.9 | 0.0 | 6.5 | 8.6 | 5.0 | 1.2 |
| Other Mental Health Services | 5.1 | 2.2 | 7.5 | 0.0 | 3.0 | 3.7 | 2.7 | 0.3 |
| Other Therapeutic Services | 11.9 | 1.9 | 0.5 | 50.3 | 0.5 | 0.1 | 1.2 | 0.0 |
| Other Diagnostic Services | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.6 | 0.0 | 0.2 |
| Psychosocial History--Intake | 1.1 | 3.0 | 1.0 | 0.5 | 2.6 | 2.3 | 3.3 | 2.0 |
| Psychiatric-Psychological Exam | 0.5 | 2.6 | 0.1 | 0.0 | 3.5 | 2.5 | 5.6 | 0.3 |
| Other Services | 5.4 | 0.1 | 0.0 | 24.2 | 11.9 | 17.9 | 6.5 | 0.0 |
| AVERAGE NUMBER OF ENCOUNTERS PER BENEFICIARY | 18.25 | 15.78 | 15.96 | 36.98 | 14.27 | 14.60 | 13.85 | 14.18 |

HHS, Office of the Secretary

DISTRIBUTION OF AMBULATORY SERVICE ENCOUNTERS BY
PERSONNEL TYPE, BY FACILITY TYPE--COMPARISON AND DEMONSTRATION
SITES ALL BENEFICIARIES

| Service Type | COMPARISON SITES | | | | DEMONSTRATION SITES | | | |
|-------------------------------|------------------|-------------|-------------|------------|---------------------|-------------|-------------|------------|
| | <u>All</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> | <u>All</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> |
| NUMBER OF ENCOUNTERS | 18,492 | 2,948 | 11,445 | 4,099 | 132,158 | 69,305 | 50,177 | 12,676 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Psychiatrist | 17.5 | 32.0 | 20.0 | 0.0 | 27.6 | 33.6 | 16.3 | 39.5 |
| Nonpsychiatric Physician | 1.0 | 0.4 | 1.6 | 0.0 | 1.1 | 2.1 | 0.3 | 0.2 |
| QMHP Psychologist | 2.4 | 2.5 | 3.3 | 0.0 | 4.6 | 2.2 | 5.0 | 15.8 |
| Other Psychologist | 1.4 | 7.4 | 0.4 | 0.0 | 3.0 | 2.9 | 4.0 | 0.0 |
| Psychiatric Nurse | 7.9 | 0.3 | 12.7 | 0.0 | 1.1 | 1.3 | 0.9 | 0.7 |
| Other Nurse | 6.0 | 0.0 | 9.6 | 0.0 | 11.5 | 8.7 | 14.0 | 16.8 |
| Psychiatric Social Worker | 16.2 | 3.5 | 24.7 | 1.5 | 33.1 | 24.3 | 50.9 | 10.3 |
| Other Social Worker | 17.3 | 48.7 | 15.4 | 0.0 | 4.8 | 8.0 | 1.4 | 0.4 |
| Counselor | 5.6 | 1.9 | 8.4 | 0.4 | 8.7 | 12.0 | 4.2 | 8.5 |
| Recreation Therapist | 0.7 | 0.0 | 1.2 | 0.0 | 0.3 | 0.6 | 0.0 | 0.0 |
| Expressive Arts Therapist | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 1.2 | 0.0 |
| Other Mental Health Personnel | 24.0 | 3.2 | 2.8 | 98.1 | 5.7 | 4.3 | 1.8 | 7.9 |

- . Comparison Group--Encounters with other mental health personnel, other social workers, and psychiatrists accounted for the majority (59 percent) of encounters. In CMHCs, encounters with other social workers constituted 49 percent of all encounters. In AMHCs, encounters with psychiatric social workers were the most numerous (25 percent). In PHPs, other mental health personnel encounters represented nearly all (98 percent) encounters.
- . Demonstration Group--Encounters with psychiatric social workers and psychiatrists accounted for the majority (61 percent) of all encounters; in CMHCs this was also true (58 percent). In AMHCs, psychiatric social worker encounters constituted 51 percent of all encounters. In PHPs, psychiatrist encounters represented 40 percent of all encounters.
- . Clearly, demonstration facilities emphasized encounters with QMHPs, particularly psychiatrists and psychiatric social workers. The distribution of encounters in comparison facilities is similar to the distribution of encounters in demonstration facilities during the baseline period.

Charges

Exhibit 119 shows the total charges to Medicare and average charge per Medicare encounter in comparison and demonstration facilities during the entire demonstration time period. Slightly less than \$200,000 was charged to Medicare by comparison facilities; there were no charges from PHPs. In contrast, nearly \$4 million was charged to Medicare by demonstration facility. For CMHCs, charges per encounter (\$26.40) were four times higher in demonstration facilities than in comparison facilities. For AMHCs, charges per encounter (\$30.31) were 2½ times higher in demonstration facilities than in comparison facilities.

These findings were consistent with the overall charges and charges per encounter by demonstration facilities during the baseline period.

(3) Analysis Of Quality Of Care

Below, comparison group/demonstration group analyses of the following characteristics are presented: termination status, reason for unplanned

EXHIBIT 119

HHS, Office of the Secretary

CHARGES, ENCOUNTERS AND CHARGES PER
ENCOUNTER--COMPARISON AND DEMONSTRATION
SITES^{1/}

| | COMPARISON SITES | | | DEMONSTRATION SITES | | |
|------------------------|------------------|-------------|------------|---------------------|-------------|------------|
| | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> |
| TOTAL MEDICARE CHARGES | \$28,998 | \$169,860 | 0 | \$1,835,984 | \$1,524,050 | \$533,873 |
| NUMBER OF ENCOUNTERS | 4,388 | 13,462 | 18,242 | 69,548 | 50,277 | 12,731 |
| CHARGE PER ENCOUNTER | \$6.69 | \$12.62 | -- | \$26.40 | \$30.31 | \$41.93 |
| Bases | 175 | 717 | 111 | | | |

^{1/} Based on records with both charge and encounter.

termination, treatment outcome and referral at termination. Like the analysis of beneficiary characteristics and services and charges statistical tests of significance were not performed.

Termination Status

Exhibit 120 shows the distribution of Medicare beneficiaries served in comparison and demonstration facilities by termination status. Highlights of the findings follow:

- . Comparison Group--The majority (52 percent) of beneficiaries had unplanned terminations, except in AMHCs and PHPs.
- . Demonstration Group--The majority (54 percent) of beneficiaries had planned terminations, except in PHPs.
- . Except for PHPs, the beneficiaries served by demonstration facilities had a greater percentage of planned terminations.

Reason For Unplanned Terminations

Exhibit 121 shows the distribution of Medicare beneficiaries served in comparison and demonstration facilities by reasons for unplanned termination. Highlights of the findings follow:

- . Comparison Group--The majority (52 percent) of all beneficiaries and beneficiaries served in CMHCs (70 percent) simply decided to stop services. Nineteen percent of the AMHC beneficiaries and 31 percent of PHP beneficiaries died.
- . Demonstration Group--The majority of all beneficiaries (66 percent) decided to stop services, irrespective of facility type. Twenty-three percent of beneficiaries served in AMHCs died.
- . The higher death rates among demonstration AMHC beneficiaries appears to be due primarily to the fact that this group was older. The same finding seems to be true for comparison PHP beneficiaries.

EXHIBIT 120

HHS, Office of the Secretary

TERMINATION STATUS (AT TERMINATION)
BY FACILITY TYPE--
COMPARISON AND DEMONSTRATION SITES

| TERMINATION STATUS | COMPARISON SITES | | | | DEMONSTRATION PERIOD | | | |
|-----------------------|------------------|-------------|-------------|------------|----------------------|-------------|-------------|------------|
| | <u>ALL</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> | <u>ALL</u> | <u>CMHC</u> | <u>AMHC</u> | <u>PHP</u> |
| NUMBER OF CASES | 362 | 86 | 247 | 29 | 3,258 | 1,444 | 1,456 | 358 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Unplanned Termination | 52.2 | 73.3 | 46.6 | 37.9 | 46.3 | 49.2 | 39.7 | 62.0 |
| Planned Termination | 47.8 | 26.7 | 53.4 | 62.1 | 53.7 | 50.8 | 60.3 | 38.0 |

EXHIBIT 121

HHS, Office of the Secretary

REASON FOR UNPLANNED
TERMINATION BY FACILITY TYPE---
COMPARISON AND DEMONSTRATION SITES

| REASON FOR UNPLANNED TERMINATION | COMPARISON SITES | | | | DEMONSTRATION PERIOD | | | |
|----------------------------------|------------------|-------|-------|-------|----------------------|-------|-------|-------|
| | ALL | CMHC | AMHC | PHP | ALL | CMHC | AMHC | PHP |
| NUMBER OF CASES | 204 | 64 | 124 | 16 | 1,446 | 672 | 558 | 216 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Moved | 16.7 | 17.2 | 17.7 | 6.3 | 10.8 | 10.3 | 12.7 | 7.4 |
| Died | 17.6 | 10.9 | 19.4 | 31.3 | 15.2 | 10.3 | 22.6 | 11.6 |
| Suicide | -- | -- | -- | -- | 0.2 | -- | 0.4 | 0.5 |
| Incarcerated | -- | -- | -- | -- | 0.7 | 1.3 | 0.2 | 0.0 |
| Decided to Stop Services | 51.5 | 70.3 | 42.7 | 43.8 | 65.9 | 73.9 | 55.6 | 67.6 |
| Other | 14.2 | 1.6 | 20.2 | 18.8 | 7.2 | 4.2 | 8.6 | 13.0 |

Treatment Outcome

Exhibit 122 shows the distribution of Mediare beneficiaries served in comparison and demonstration facilities by treatment outcome. Highlights of the findings follow:

- . Comparison Group--The majority (79 percent) of all beneficiaries either had improved or showed no change upon termination; 56 percent of CMHC beneficiaries were considered to have no change.
- . Demonstration Group--The majority (76 percent) of all beneficiaries either had improved or showed no change upon termination; 52 percent of PHP beneficiaries were considered to have no change.
- . The distributions of the two groups were remarkably similar, indicating that the demonstration group fared no better or no worse than the comparison group from a treatment outcome perspective. It should be noted that the differences in proportions in the "Could Not Tell" between the two groups was undoubtedly a function of the data collection methods. Comparison group facilities self-reported treatment outcomes, whereas Macro abstracted treatment outcome data from demonstration group facilities' clinical records.

Referral

Exhibit 123 shows the distribution of Medicare beneficiaries in comparison and demonstration facilities by referral upon termination. Highlights of the findings follow:

- . Comparison Group--The majority (65 percent) of all beneficiaries had no planned referral upon termination, except for beneficiaries served in PHPs (7 percent). Most beneficiaries in this latter group had some planned referrals.
- . Demonstration Group--Except for CMHC and PHP beneficiaries, the majority of beneficiaries were terminated without any planned referral. Substantial proportions of CMHC and PHP beneficiaries were referred to other mental health centers, skilled nursing facilities, or "other" referral sources.

EXHIBIT 122

HHS, Office of the Secretary

TREATMENT OUTCOME AT TERMINATION
BY FACILITY TYPE--
COMPARISON AND DEMONSTRATION SITES

| OUTCOME | COMPARISON SITES | | | | DEMONSTRATION PERIOD | | | |
|-----------------|------------------|-------|-------|-------|----------------------|-------|-------|-------|
| | ALL | CMHC | AMHC | PHP | ALL | CMHC | AMHC | PHP |
| NUMBER OF CASES | 348 | 86 | 235 | 27 | 3,070 | 1,315 | 1,417 | 338 |
| PERCENT | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Improved | 37.1 | 36.0 | 37.9 | 33.3 | 35.6 | 30.9 | 42.4 | 25.1 |
| No Change | 41.7 | 55.8 | 37.4 | 33.3 | 40.1 | 35.7 | 41.4 | 51.8 |
| Regressed | 12.6 | 7.0 | 12.3 | 33.3 | 5.6 | 3.8 | 6.1 | 10.1 |
| Could Not Tell | 8.6 | 1.2 | 12.3 | -- | 18.8 | 29.6 | 10.0 | 13.0 |

HHS, Office of the Secretary

BENEFICIARY REFERRALS (AT TERMINATION)
BY FACILITY TYPE--
COMPARISON AND DEMONSTRATION SITES

| REFERRAL | COMPARISON SITES | | | | DEMONSTRATION PERIOD | | | |
|---|------------------|------|------|------|----------------------|-------|-------|------|
| | ALL | CMHC | AMHC | PHP | ALL | CMHC | AMHC | PHP |
| NUMBER OF CASES | 325 | 85 | 213 | 27 | 2,920 | 1,263 | 1,323 | 334 |
| No Planned Referral | 64.6 | 75.3 | 67.6 | 7.4 | 52.4 | 48.9 | 56.8 | 45.2 |
| Nonpsychiatric Practice | 0.9 | -- | 0.9 | 3.7 | 2.8 | 3.6 | 1.8 | 3.3 |
| Private Psychiatric Practice | 3.4 | 1.2 | 3.8 | 7.4 | 3.4 | 6.3 | 0.9 | 2.1 |
| Other Private Mental Health Practice | 1.5 | 2.4 | 0.9 | 3.7 | 0.7 | 0.6 | 0.4 | 2.4 |
| County Mental Hospital | 0.3 | -- | -- | 3.7 | 0.8 | 0.7 | 0.5 | 2.4 |
| State Mental Hospital | 2.8 | 3.5 | 2.8 | -- | 4.6 | 3.9 | 4.9 | 6.0 |
| Veterans Administration Hospital | 0.3 | -- | -- | 3.7 | 0.8 | 1.0 | 0.6 | 0.9 |
| Private Mental Hospital | 0.6 | -- | 0.5 | 3.7 | 0.6 | 0.6 | 0.5 | 0.9 |
| Other Mental Health Center/Clinic | 4.9 | 2.4 | 3.8 | 27.2 | 7.4 | 8.0 | 5.6 | 12.3 |
| Skilled Nursing Facility | 7.1 | 5.9 | 6.6 | 14.8 | 12.6 | 10.8 | 15.9 | 6.6 |
| Intermediate Care Facility | 1.2 | 2.4 | 0.9 | -- | 2.5 | 1.1 | 4.3 | 0.6 |
| Other Unspecified Long-Term Care Facility | 1.8 | 2.4 | 0.5 | 11.1 | 0.3 | 0.1 | 0.3 | 0.9 |
| Other Hospital | 1.2 | 1.2 | 1.4 | -- | 4.7 | 8.7 | 1.4 | 2.7 |
| Other | 10.8 | 3.5 | 12.7 | 18.5 | 8.7 | 8.6 | 7.0 | 15.6 |

. In general, those beneficiaries who did not simply decide to terminate treatment had a planned referral, in both groups. Thus, those distributions generally mirror the planned versus unplanned termination distributions.

Summary

In terms of the quality of care measures used, the comparison and demonstration groups had comparable results. This means that there did not appear to be any exogenous variables at play affecting quality of care in the demonstration facilities.

4. PROGRAM OPERATIONS

Given that comparison facilities were selected within the States as demonstration facilities and based upon the same size as demonstration facilities, it was not surprising that the characteristics and operations of the comparison facilities and demonstration facilities were similar. There were several noteworthy exceptions:

- . Staffing--In general, the staffing patterns between the comparison and demonstration facilities were similar. However, the PHPs in the comparison group, there was little or any psychiatric involvement which paralleled the PHPs in the baseline period.
- . Clinical Management--Although staffing patterns were similar, QMHPs were not necessarily in clinical supervisory positions in comparison facilities. This was analogous to demonstration facilities in the baseline period. Also analogous to the baseline period, psychiatrists in comparison facilities did not always approve treatment or monitor treatment.
- . Services--In general, the types of services offered by both groups were similar. However, off-site services in comparison facilities were generally provided by non-QMHPs, analogous to the baseline period in demonstration facilities.
- . Administration And Management--In general, the comparison facilities had neither utilization review programs nor the types of clinical records of the demonstration facilities during the demonstration period. With respect to the latter, treatment plans were generally not as comprehensive and discharge summaries were not prepared.

Thus, the observed differences in program operations between the two groups appears to be the direct result of the requirements of the demonstration.

One final point is worth noting. The comparison facilities were being influenced by many of the same exogenous factors as the demonstration facilities, such as the advent of the ADM Services Block Group, the block granting of social services, and other cost containment. Responses to such influences by comparison facilities were manifested similar to those of demonstration facilities, e.g., ensuring that new staff hires were licensable individuals (QMHPs). Thus, there did not appear to be extraneous factors driving the demonstration results, other than the demonstration.

VI. THE NATIONAL SURVEY AND ITS USE IN
COST PROJECTIONS

VI. THE NATIONAL SURVEY AND ITS USE IN COST PROJECTIONS

As we noted in the second chapter of this report and in the Evaluation Plan for the Medicare Mental Health Demonstration, there are issues of internal and external validity relative to the design of the demonstration. This chapter presents our approach to the external validity issues posed by the demonstration's design--a national survey of all ambulatory mental health treatment facilities. The chapter is organized as follows:

- . Rationale for the national survey
- . The survey universe
- . Content of the survey instrument
- . Data collection
- . Analysis of national survey data
- . Statistical comparison of demonstration and survey sites

1. RATIONALE FOR THE NATIONAL SURVEY

The purposes of the national survey of ambulatory mental health facilities were threefold:

- . To develop a means for determining the representativeness of the facilities participating in the Medicare Mental Health Demonstration (MMHD)
- . To establish a database for estimating the potential supply of ambulatory mental health programs able to meet MMHD requirements
- . To establish a database for estimating the utilization and costs attributable to Medicare beneficiaries for those facilities meeting MMHD requirements

The latter two purposes follow from the first one in terms of enhancing the generalizability of the demonstration results by creating a basis upon which to project outcomes if demonstration mental health benefits were to be implemented on a nationwide basis.

The question of representativeness relates to the methods for selection of the facilities participating in the demonstration. As was noted in detail in the Evaluation Plan, the facilities participating in the demonstration constitute a purposive sample. As such, there was a nonprobabilistic basis for selection, attenuating the ability to project demonstration results to the universe of facilities from which the demonstration facilities were selected. The national survey affords determination of the representativeness of the sample by establishing the proportion of the survey universe having salient characteristics similar to the demonstration facilities, i.e., the ability to meet MMHD requirements, as well as comparison of the representativeness of demonstration facilities relative to the number of beneficiaries served by the universe of facilities. Thus, the national survey will facilitate supply, utilization, and cost projections based upon the demonstration results, which will be performed in the future by the HCFA Office of the Actuary.

2. THE SURVEY UNIVERSE

The universe of facilities surveyed was composed principally of community mental health centers and ambulatory mental health clinics known to the National Institute of Mental Health (NIMH). The universe was compiled by NIMH as a function of its 1982 Inventory of Mental Health Organizations. For community mental centers, outpatient clinics, and multiservice mental health facilities, the database was deemed to be inclusive of all known facilities. However, the listing of day/night (partial hospitalization) facilities in the database was known to be only a partial listing. That is, NIMH does not have a complete database of all such facilities. Consequently, the survey could only include such facilities known to NIMH.

Accordingly, the universe for the survey was 2,112 facilities, less the 59 demonstration and comparison group members (40 demonstration and 17 comparison group facilities, plus two drop-outs). The survey comprised an exhaustive sample of these 2,053 facilities as follows:

- . 769 community mental health centers
- . 1,284 other ambulatory mental health treatment facilities

3. CONTENT OF THE SURVEY INSTRUMENT

In determining the "potential supply" of ambulatory mental programs, it is deemed imperative to know what proportion of the provider (facility) universe could meet the basic provider participation requirements of the MMHD. Accordingly, the survey instrument developed sought to collect from each member of the universe data related to the following key MMHD requirements:

- . Facility auspices
- . Availability of a psychiatrist for clinical care supervision
- . Availability of Qualified Mental Health Professionals (QMHPs)
- . Operational utilization review plan
- . Maintenance of clinical records that include individual treatment plans, progress notes, discharge summary, and drug use profile
- . Provision of ambulatory mental health services

In addition, it is important to assess the "capacity" of each member of the universe to provide and bill for services to Medicare beneficiaries. To this end, the survey instrument included the following data:

- . Billing and collections policies
- . Medicare Part B billing status and mechanisms
- . Number of ambulatory clients served, by service
- . Number of ambulatory clients served who were Medicare beneficiaries, by service
- . Number of Medicare beneficiaries who were served by a QMHP or when a QMHP was present in the facility, by service
- . Average number of encounters or days of partial hospitalization per client served, by service

Consequently, the survey instrument was designed to collect data in three major areas: (1) organizational characteristics, (2) programmatic/administrative

characteristics, and (3) utilization. The data items specified above were grouped into these three areas accordingly.

The survey instrument, shown as Exhibit 124, was modified substantially from the pretest to provide greater precision in response to specific items as follows:

- . Number Of Full-Time Equivalent (FTE) Staff--Fractions of FTEs were to be reported
- . Scheduled Weekly Person-Hours--Fractions of hours were to be reported
- . Clients (And Beneficiaries) Served--Caseload data were to be reported by service
- . Average Number Of Encounters--Fractions of encounters were to be reported

Pretest respondents deemed this necessary to accurately describe their unique "supply" and "utilization" circumstances.

All data were reported for 1980 unless a different year was more appropriate and, thus, used by a given respondent.^{1/}

4. DATA COLLECTION

The survey instrument and its "justification" were structured to conform to OMB Standard Form 83A. Upon clearance of the form by the Office of Management and Budget (OMB), the survey was conducted by mail. Based on past experience with similar surveys, we believed that a reasonable response rate was achievable with appropriate mail and telephone follow-up according to the schedule below:

^{1/} It should be noted that approximately 2 percent of respondents reported for other than 1980.

MEDICARE MENTAL HEALTH DEMONSTRATION EVALUATION
NATIONAL SURVEY

OMB No. 0990-0079
09/30/82

PLEASE ENTER NEW AND CORRECTED INFORMATION BELOW:

Facility: _____
Name
Address: _____
Street

City

State Zip Code

Telephone: ____/____/____ - ____/____/____
Area Code Number

GENERAL INSTRUCTIONS: Please complete all of the items on this survey form by checking (✓) the appropriate boxes or printing written responses. Responses to items 1-11 should reflect current operating characteristics. 1980 data should be provided for items 12-15. Please clarify or comment on any of the items and/or your responses to them in the space provided on the back of the form.

Check only one box for each item below that best describes your facility.

1. Auspices (check one only):

- | | |
|--|--|
| <input type="checkbox"/> 01 Municipal/city government | <input type="checkbox"/> 08 For-profit individual |
| <input type="checkbox"/> 02 County government | <input type="checkbox"/> 09 For-profit partnership |
| <input type="checkbox"/> 03 City/county government | <input type="checkbox"/> 10 For-profit corporation |
| <input type="checkbox"/> 04 State government | <input type="checkbox"/> 11 Nonprofit church related |
| <input type="checkbox"/> 05 State and county government | <input type="checkbox"/> 12 Not-for-profit corporation |
| <input type="checkbox"/> 06 Hospital district or authority | <input type="checkbox"/> 13 Other nonprofit |
| <input type="checkbox"/> 07 Veterans Administration | <input type="checkbox"/> 14 Other (specify): _____ |

2. Type of facility (check one only):

Hospital Based Non-Hospital Based

- | | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | 01 Community mental health center (funded under P.L. 88-164, P.L. 89-105, or P.L. 94-63) |
| <input type="checkbox"/> | <input type="checkbox"/> | 02 Other multiservice mental health facility |
| <input type="checkbox"/> | <input type="checkbox"/> | 03 Ambulatory mental health clinic/agency (outpatient services only) |
| <input type="checkbox"/> | <input type="checkbox"/> | 04 Partial hospitalization program |
| <input type="checkbox"/> | <input type="checkbox"/> | 05 Other (specify): _____ |

3. Is the clinical care provided in your facility under the general supervision of a psychiatrist?

- ☐ 01 Yes
☐ 02 No If no, skip to item 5.

4. For how many scheduled days and hours per month is this supervisory psychiatrist available at your facility?

Days per month ____/____/____ Person-hours per month ____/____/____/____ (complete both)

5. How many of the following mental health professionals (psychiatrist, Ph.D. clinical psychologist, master's level psychiatric social worker, master's level psychiatric nurse) does your facility employ? Indicate the total number of professional mental health workers as well as total full-time equivalents (FTEs) and the total number of scheduled hours worked per week for each professional category specified below. Complete all three columns for each applicable mental health professional.

| Mental Health Professional | Total Number of Persons | Total FTEs | Total Scheduled Weekly Person-Hours |
|---|-------------------------|----------------|-------------------------------------|
| a. Psychiatrist | ____/____/____ | ____/____/____ | ____/____/____ |
| b. Psychologist--Ph.D. in clinical psychology | ____/____/____ | ____/____/____ | ____/____/____ |
| c. Psychiatric social worker--master's of social work | ____/____/____ | ____/____/____ | ____/____/____ |
| d. Psychiatric nurse-master's of psychiatric nursing | ____/____/____ | ____/____/____ | ____/____/____ |

6. Does your facility have a written quality assurance/utilization review plan currently in effect which provides for review, on a sample or other basis, of services rendered?

- ☐ 01 Yes
☐ 02 No

7. Do the clinical records maintained in your facility on each client contain the following? (check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> 01 Individualized plan of treatment | <input type="checkbox"/> 04 Drug use profile |
| <input type="checkbox"/> 02 Progress notes | <input type="checkbox"/> 05 All of the preceding |
| <input type="checkbox"/> 03 Discharge summary | |

PROGRAMMATIC/ADMINISTRATIVE INFORMATION

8. Which of the following ambulatory mental health services are provided routinely by your facility on a formal organized basis (check all that apply)?
- ☐ 01 Outpatient care (mental health treatment provided on an outpatient basis to persons who do not require either 24-hour or partial hospitalization)
- ☐ 02 Partial hospitalization care (planned therapeutic program provided during the day, evening, night, or weekend to persons who need broader programs than are possible through outpatient visits, but who do not require 24-hour hospitalization)
- ☐ 03 Emergency services (psychiatric care provided in emergency situations by mental health staff--on duty or on call--specifically assigned for this purpose. Exclude programs providing only holding bed facilities)
- ☐ 04 Other ambulatory mental health service (specify): _____
9. Do you use the following in billing clients for services rendered in your facility? (check all that apply)
- ☐ 01 Charge schedule, fee schedule, list of fees
- ☐ 02 Sliding fee scale
- ☐ 03 None of the above
- If you have checked either 01 or 02, please attach a copy of your charge schedule and/or sliding fee scale, as well as a copy of your billing and collections policies and procedures, to your completed survey form prior to returning it.
10. Do you currently bill Medicare for services rendered to Medicare Part B beneficiaries in your facility?
- ☐ 01 Yes
- ☐ 02 No If no, skip to item 12.
11. Through which one of the following mechanisms does your facility bill Medicare?
- ☐ 01 The facility's own Medicare provider number
- ☐ 02 The Medicare provider number of the facility's psychiatrist(s)
- ☐ 03 Affiliated hospital
- ☐ 04 Other (specify): _____

UTILIZATION DATA

In completing items 12-15, please provide 1980 data for each of the services checked in item 8 of this form. If data are not available, provide most recent data, ensure that all data entries are for the same time period, and specify the year data were collected. Please enter unduplicated counts for ambulatory clients. Ambulatory clients are individuals receiving only those mental health services checked in item 8. If data are not available, check the appropriate box.

| | Outpatient | Partial | Emergency | Other | Data Not Available |
|--|----------------|----------------|----------------|----------------|--------------------------|
| 12. Total number of ambulatory clients served | ____/____/____ | ____/____/____ | ____/____/____ | ____/____/____ | <input type="checkbox"/> |
| 13. Total number of ambulatory clients served who were eligible for Medicare coverage | ____/____/____ | ____/____/____ | ____/____/____ | ____/____/____ | <input type="checkbox"/> |
| 14. Total number of Medicare eligible ambulatory clients served by or when the following mental health professionals were in the facility: psychiatrist, Ph.D. clinical psychologist, master's level psychiatric social worker, master's level psychiatric nurse | ____/____/____ | ____/____/____ | ____/____/____ | ____/____/____ | <input type="checkbox"/> |
| 15. Average number of encounters per ambulatory client served. (An encounter is a face-to-face contact between a patient and a mental health professional; a physician; recreation therapist; expressive arts therapist; a counselor; or other mental health professional or paraprofessional.) For partial hospitalization, enter the average number of <u>days</u> of partial hospitalization. | ____/____/____ | ____/____/____ | ____/____/____ | ____/____/____ | <input type="checkbox"/> |

Year data were collected, if other than 1980: ____/____/____

Comments:

Date Form Completed: ____/____/____ Person Completing Form: _____
M M D D Y Y Name and Title

| <u>Date</u> | <u>Follow-Up Method</u> |
|----------------------------|---|
| 2 weeks prior to due date | Mail reminder letter |
| 5 weeks following due date | Letter containing second survey package, with 2 copies of form |
| 7 weeks following due date | Telephone follow-up |

Survey packages contained a cover letter, the survey instrument, and a stamped, self-addressed return envelope to facilitate response. Packages were sent out initially in June 1982, and all responses received were included in the survey analysis presented later.

5. ANALYSIS OF NATIONAL SURVEY DATA

Overall, there were 1,293 responses to the national survey received, or 63 percent of the universe of facilities to which survey packages were mailed. These responses represented the following types of facilities:

| | <u>Responses Received</u> | <u>Percent Response</u> |
|---|-------------------------------|-----------------------------|
| Community mental health centers | 471 | 61 |
| Other ambulatory mental health facilities | <u>822</u> | <u>64</u> |
| TOTAL | 1,293 | 63 |

Of these responses, 221 were not included in the subsequent analysis for the following reasons:

| | <u>Community Mental Health Centers</u> | <u>Other Ambulatory Mental Health Facilities</u> | <u>Total</u> |
|--|--|--|--------------|
| Facility actually operated by a hospital | 86 | 23 | 109 |
| Facility had no involvement with Medicare and, therefore, did not complete survey instrument | 1 | 92 | 93 |
| Facility no longer open or operating as a mental health treatment facility | <u>5</u> | <u>14</u> | <u>19</u> |
| TOTAL | 92 | 129 | 221 |

Thus, the number of responses used in the analysis was 1,072, comprising the following types of facilities: 379 community mental health centers, 416 ambulatory mental health clinics, 17 day/night treatment facilities, 257 other multiservice ambulatory mental health treatment facilities, and 3 not identified by facility type. The category of "other ambulatory mental health facilities" used to present survey findings includes the latter four types of facilities above. Similarly, the category "ambulatory mental health clinic" used to present survey findings includes ambulatory mental health clinics, other multiservice ambulatory mental health treatment facilities, and those not classified by facility type.

In reviewing the following analyses, it is important to note that there was some nonresponse to all items of the survey instrument. Therefore, the number of valid responses to reported items are always included as part of the analysis. Where percentages are reported, they are based on the number of valid responses to a given item. Finally, only those analyses are presented that will bear later on the future task of projecting the results of the demonstration or determining the representativeness of demonstration facilities.

No effort has been made in this report to weight survey results, which is typically done in surveys to adjust for non-response. Subsequent actuarial projections based upon the survey and demonstration findings will weight survey responses so that there is no need to do so here. Results reported herein are simply based on the tabulations from valid responses to survey items.

(1) How Many Facilities Meet The Requirements Of The Demonstration?

If provider status were to be given today under Medicare to ambulatory mental treatment facilities using MMHD requirements (physician supervision, QMHPs, covered services, clinical records, and utilization review plan) as conditions of participation, a major policy question relates to how many facilities would meet these conditions at this point in time. Exhibit 125 shows the unweighted distribution of facilities that responded to the survey by MMHD requirement and facility type. As the exhibit shows,

EXHIBIT 125

HHS, Office of the Secretary

SURVEY RESPONDENTS MEETING OR
NOT MEETING ALL MMHD REQUIREMENTS

| | Community Mental Health Centers | | Ambulatory Mental Health Clinics | | Partial Hospitalization Programs | | All Facilities | |
|---|---------------------------------------|---------|--|---------|--|---------|-------------------|---------|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Facilities meeting all MMHD requirements | 295 | 78.0 | 325 | 49.5 | 11 | 64.7 | 631 | 60.0 |
| Facilities <u>not</u> meeting all MMHD requirements | 83 | 22.0 | 332 | 50.5 | 6 | 35.3 | 421 | 40.0 |
| All facilities responding to survey items | 378 | 100.0 | 657 | 100.0 | 17 | 100.0 | 1,052 | 100.0 |

631 facilities meet all MMHD requirements, or 60 percent of the number of those facilities responding to applicable survey items. By type of facility, 78.0 percent of the community mental health center respondents meet all MMHD requirements, 49.5 percent of the ambulatory mental health clinic respondents do, and 64.7 percent of the partial hospitalization programs do.

In considering conditions of participation for ambulatory mental health treatment facilities, there are a number of possible policy options. That is, not all MMHD requirements need be adopted as conditions of participation. Exhibit 126 shows various combinations of MMHD requirements as logical policy alternatives and the distribution of facilities meeting each combination, by facility type. The exhibit shows that:

- . 79, or 7.5 percent, of responding facilities meet only the psychiatric supervision, QMHP, record keeping, and covered services requirements of the demonstration (Option 1)
- . 100, or 9.5 percent, of responding facilities meet only the psychiatric supervision, QMHP, utilization review, and covered services requirements of the demonstration (Option 2)
- . 44, or 4.2 percent, of responding facilities meet only the psychiatric supervision, QMHP, and covered services requirements of the demonstration (Option 3)

Overall, 854, or 81.2 percent, of the facilities responding to the survey meet at least Option 3 requirements.

(2) Of Those Facilities Meeting All MMHD Requirements, How Many Currently Bill Medicare For Services Rendered?

"Supply" may be examined in other ways as well. One such way is the analysis of those facilities meeting all MMHD requirements that also have experience in billing Medicare. Such facilities would essentially stand immediately ready to participate, should the demonstration parameters be implemented on a nationwide basis. Below, we show that:

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
JANUARY 1964

TO THE HONORABLE CHAIRMAN OF THE BOARD OF TRUSTEES
OF THE UNIVERSITY OF CHICAGO
FROM THE DEPARTMENT OF CHEMISTRY

RE: REPORT OF THE DEPARTMENT OF CHEMISTRY
FOR THE YEAR 1963

THE DEPARTMENT OF CHEMISTRY
HAS THE HONOR TO ACKNOWLEDGE
THE RECEIPT OF YOUR LETTER
OF JANUARY 15, 1964

AND TO ADVISE YOU THAT
THE DEPARTMENT OF CHEMISTRY
HAS BEEN ADVISED BY THE
BOARD OF TRUSTEES
THAT THE DEPARTMENT OF CHEMISTRY
IS TO BE REORGANIZED
EFFECTIVE JANUARY 1, 1965

HHS, Office of the Secretary

FACILITIES MEETING OPTIONAL CONDITIONS

| Medicare Conditions of Participation Options | Community Mental Health Centers | | Ambulatory Mental Health Clinics | | Partial Hospitalization Programs | | All Facilities | |
|--|---------------------------------|---------|----------------------------------|---------|----------------------------------|---------|----------------|---------|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Facilities meeting all MMHD requirements | 295 | 78.0 | 325 | 49.5 | 11 | 64.7 | 631 | 60.0 |
| Facilities meeting psychiatric supervision, QMHP, record keeping, and covered services requirements only | 16 | 4.2 | 63 | 9.6 | 0 | 0.0 | 79 | 7.5 |
| Facilities meeting psychiatric supervision, QMHP, utilization review, and covered services requirements only | 20 | 5.3 | 79 | 12.0 | 1 | 5.9 | 100 | 9.5 |
| Facilities meeting psychiatric supervision, QMHP, and covered services requirements only | 4 | 1.1 | 38 | 5.8 | 2 | 11.8 | 44 | 4.2 |
| Facilities <u>not</u> having any of the above combinations of MMHD requirements | 43 | 11.4 | 152 | 23.1 | 3 | 17.6 | 198 | 18.8 |
| All facilities responding to survey items | 378 | 100.0 | 657 | 100.0 | 17 | 100.0 | 1,052 | 100.0 |

- . 475 of the 631 (or 75.3 percent) of those facilities meeting all MMHD requirements currently bill Medicare for services rendered Medicare Part B beneficiaries.
- . 156 of the 631 (or 24.7 percent) of those facilities meeting all MMHD requirements do not currently bill Medicare.

Exhibit 127 shows the mechanisms used to bill Medicare by those facilities that meet all MMHD requirements. The exhibit shows that:

- . 78.3 percent bill using their own Medicare number
- . 17.5 percent bill using the Medicare numbers of their psychiatrists
- . 0.6 percent bill through an affiliated hospital
- . 3.6 percent bill through another mechanism

The predominant "other mechanism" used was billing through a unit of government, e.g., county health department.

(3) Of Those Facilities Not Meeting All MMHD Requirements, How Many Currently Bill Medicare For Services Rendered?

Another way of looking at supply is to analyze those facilities that currently bill Medicare for services rendered Medicare Part B beneficiaries, but do not meet all MMHD requirements. We noted earlier three potential policy options for conditions of participation by ambulatory mental health programs under Medicare. Taking Option 3 (psychiatric supervision, QMHP, and covered services) as the minimal conditions of participation affecting the highest number of facilities and representing the lowest potential investment to undertake the changes necessary to meet all MMHD requirements, we determined how many of those facilities currently bill Medicare. Below, we show that:

- . 619 of the 854, or 72.5 percent, of those facilities meeting at least Option 3 requirements currently bill Medicare
- . 235 of the 854, or 27.5 percent, of those facilities meeting at least Option 3 requirements do not currently bill Medicare

EXHIBIT 127

HHS, Office of the Secretary

MECHANISMS USED TO BILL MEDICARE BY THOSE FACILITIES MEETING ALL MMHD REQUIREMENTS

| Mechanism Used To Bill Medicare | Community Mental Health Centers | | Ambulatory Mental Health Clinics | | Partial Hospitalization Programs | | All Facilities Meeting All MMHD Requirements | |
|---|---------------------------------|---------|----------------------------------|---------|----------------------------------|---------|--|---------|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Facility's own Medicare number | 195 | 78.9 | 175 | 77.4 | 2 | 100.0 | 372 | 78.3 |
| Medicare number of facility's psychiatrist(s) | 42 | 17.0 | 41 | 18.1 | 0 | 0.0 | 83 | 17.5 |
| Billing through an affiliated hospital | 2 | 0.8 | 1 | 0.4 | 0 | 0.0 | 3 | 0.6 |
| Other mechanism | 8 | 3.2 | 9 | 4.0 | 0 | 0.0 | 17 | 3.6 |
| All facilities meeting all MMHD requirements responding to survey items | 247 | 100.0 | 226 | 100.0 | 2 | 100.0 | 475 | 100.0 |

Exhibit 128 shows the mechanisms used to bill Medicare by those facilities that meet at least Option 3 requirements. The exhibit shows that:

- . 79.3 percent bill using their own Medicare number
- . 16.8 percent bill using their psychiatrists' Medicare numbers
- . 0.8 percent bill through an affiliated hospital
- . 3.1 percent bill through another mechanism

The predominant other mechanism used was billing through a unit of government, e.g., county health department.

(4) What Is The Treatment Capacity Of Those Facilities Meeting All MMHD Requirements

Knowing the supply of facilities meeting all or some MMHD requirements is of limited utility because it only indicates the number of facilities that may in the future (or perhaps have in the past) bill Medicare. It does not give an indication of how many billings may occur under a given set of conditions, e.g., the parameters of the demonstration. To examine the policy question of "demand," we developed the concept of "treatment capacity." Like supply, treatment capacity may be considered in a variety of ways.

First, the number of Medicare beneficiaries served in a specified period of time may be used as an indicator of treatment capacity and, therefore, potential billings. Exhibit 129 shows the number of Medicare beneficiaries served in 1980 by facilities meeting all MMHD requirements, by treatment environment and facility type. The total, median, mean, and standard deviation are presented. The exhibit shows that:

- . The average number of Medicare beneficiaries served by community mental health centers was 319.4, with a median of 122.0.
- . The average number of Medicare beneficiaries served by ambulatory mental health clinics was 97.6, with a median of 38.5
- . The average number of Medicare beneficiaries served by partial hospitalization programs was 9.3, with a median of 1.5.

EXHIBIT 128

HHS, Office of the Secretary

MECHANISMS USED TO BILL MEDICARE
BY THOSE FACILITIES MEETING AT LEAST
OPTION 3 REQUIREMENTS

| Mechanism Used To Bill Medicare | Community Mental Health Centers | | Ambulatory Mental Health Clinics | | Partial Hospitalization Programs | | All Facilities Meeting At Least Option 3 Requirements | |
|--|---------------------------------------|---------|--|---------|--|---------|--|---------|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Facility's own Medicare number | 222 | 79.6 | 265 | 78.9 | 4 | 100.0 | 491 | 79.3 |
| Medicare number of facility's psychiatrist(s) | 46 | 16.5 | 58 | 17.3 | 0 | 0.0 | 104 | 16.8 |
| Billing through an affiliated hospital | 2 | 0.7 | 3 | 0.9 | 0 | 0.0 | 5 | 0.8 |
| Other mechanism | 9 | 3.2 | 10 | 3.0 | 0 | 0.0 | 19 | 3.1 |
| All facilities meeting at least Option 3 requirements responding to survey items | 279 | 100.0 | 336 | 100.0 | 4 | 100.0 | 619 | 100.0 |

HHS, Office of the Secretary
NUMBER OF MEDICARE BENEFICIARIES SERVED BY
FACILITIES MEETING ALL MMHD REQUIREMENTS

| Treatment Environment | Community Mental Health Centers | | Ambulatory Mental Health Clinics | | Partial Hospitalization Programs | | Total | |
|----------------------------------|---------------------------------|---------|----------------------------------|---------|----------------------------------|---------|--------|---------|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| <u>Outpatient Services</u> | | | | | | | | |
| Total | 47,995 | 77.9 | 16,630 | 89.7 | 5 | 6.7 | 64,630 | 80.5 |
| Median | 127.5 | | 44.9 | | 0.5 | | 79.0 | |
| Mean | 315.8 | | 98.0 | | 0.8 | | 197.6 | |
| Standard Deviation | 1,051.3 | | 204.3 | | 2.0 | | 738.7 | |
| <u>Partial Hospitalization</u> | | | | | | | | |
| Total | 6,334 | 10.3 | 898 | 4.7 | 70 | 93.3 | 7,282 | 9.1 |
| Median | 14.9 | | 0.3 | | 5.0 | | 5.2 | |
| Mean | 48.4 | | 6.2 | | 11.7 | | 26.2 | |
| Standard Deviation | 112.9 | | 14.6 | | 19.1 | | 80.9 | |
| <u>Emergency Services</u> | | | | | | | | |
| Total | 3,465 | 5.6 | 539 | 2.9 | 0 | 0.0 | 4,004 | 5.0 |
| Median | 8.6 | | 0.2 | | 0.0 | | 0.5 | |
| Mean | 33.6 | | 5.3 | | 0.0 | | 19.0 | |
| Standard Deviation | 81.5 | | 14.6 | | 0.0 | | 59.5 | |
| <u>Other Ambulatory Services</u> | | | | | | | | |
| Total | 3,854 | 6.2 | 507 | 2.7 | 0 | 0.0 | 4,361 | 5.4 |
| Median | 0.6 | | 0.2 | | 0.0 | | 0.1 | |
| Mean | 24.2 | | 3.8 | | 0.0 | | 14.6 | |
| Standard Deviation | 162.7 | | 43.4 | | 0.0 | | 122.4 | |
| <u>Total</u> | | | | | | | | |
| Total | 61,648 | 100.0 | 18,554 | 100.0 | 75 | 100.0 | 80,277 | 100.0 |
| Median | 122.0 | | 38.5 | | 1.5 | | 62.0 | |
| Mean | 319.4 | | 97.6 | | 9.3 | | 205.3 | |
| Standard Deviation | 1,123.4 | | 202.5 | | 17.1 | | 808.8 | |
| <u>Number of Facilities</u> | | | | | | | | |
| | 193 | | 190 | | 8 | | 391 | |

Overall, the average number of Medicare beneficiaries served by ambulatory mental health treatment facilities was 205.3, with a median of 62.0--the majority (79 percent) of whom were served in an outpatient treatment environment. In addition, the total number of Medicare beneficiaries served in community mental health centers was 61,648, in ambulatory mental health clinics was 18,554, in partial hospitalization programs was 75, and in total was 80,277.

Second, a requirement of the demonstration was that Medicare beneficiaries be served by a QMHP or when a QMHP was present in the facility in order for the service to be reimbursable. Exhibit 130 shows the unweighted total, mean, standard deviation, and median numbers of Medicare beneficiaries served in 1980 by QMHPs or when QMHPs were present in facilities meeting all MMHD requirements, by treatment environment and facility type. The exhibit shows that:

- . The average number of Medicare beneficiaries served by QMHPs or when QMHPs were present in community mental health centers was 312.4, with a median of 109.0
- . The average number of Medicare beneficiaries served by QMHPs or when QMHPs were present in ambulatory mental health clinics was 83.3, with a median of 30.2
- . The average number of Medicare beneficiaries served by QMHPs or when QMHPs were present in partial hospitalization programs was 9.4, with a median of 1.5.

Overall, the average number of Medicare beneficiaries served in ambulatory mental health treatment facilities by QMHPs or when QMHPs were present was 196.3, with a median of 57.5. In addition, the total number of such beneficiaries so served in community mental health centers was 58,426, in ambulatory mental health clinics was 14,904, in partial hospitalization programs was 75, and in total was 73,405.

Third, facilities bill Medicare under the demonstration according to encounters^{2/} rendered Medicare beneficiaries by QMHPs or when QMHPs were present

^{2/} An encounter is a face-to-face contact between a patient and: a QMHP, a physician, a recreation therapist, an expressive arts therapist, a counselor, or other mental health professional or paraprofessional. For partial hospitalization, it is a day of partial hospitalization, whether or not it is a full day of treatment.

HHS, Office of the Secretary

NUMBER OF MEDICARE BENEFICIARIES SERVED BY QMHPs
OR WHEN QMHPs WERE PRESENT IN FACILITIES MEETING
ALL MHD REQUIREMENTS

| Treatment Environment | Community Mental Health Centers | | Ambulatory Mental Health Clinics | | Partial Hospitalization Programs | | Total | |
|----------------------------------|---------------------------------|---------|----------------------------------|---------|----------------------------------|---------|--------|---------|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| <u>Outpatient Services</u> | | | | | | | | |
| Total | 45,357 | 77.6 | 13,207 | 88.6 | 5 | 6.7 | 58,569 | 79.8 |
| Median | 118.0 | | 42.0 | | 0.5 | | 72.3 | |
| Mean | 312.8 | | 84.7 | | 0.8 | | 190.8 | |
| Standard Deviation | 1,075.5 | | 163.0 | | 2.0 | | 755.9 | |
| <u>Partial Hospitalization</u> | | | | | | | | |
| Total | 6,018 | 10.3 | 774 | 5.2 | 70 | 93.3 | 6,862 | 9.3 |
| Median | 12.5 | | 0.2 | | 5.0 | | 3.6 | |
| Mean | 47.7 | | 5.7 | | 11.7 | | 25.5 | |
| Standard Deviation | 115.1 | | 14.5 | | 19.1 | | 82.1 | |
| <u>Emergency Services</u> | | | | | | | | |
| Total | 3,223 | 5.5 | 416 | 2.8 | 0 | 0.0 | 3,639 | 5.0 |
| Median | 8.3 | | 0.1 | | 0.0 | | 0.4 | |
| Mean | 31.9 | | 4.1 | | 0.0 | | 17.5 | |
| Standard Deviation | 81.7 | | 12.2 | | 0.0 | | 59.1 | |
| <u>Other Ambulatory Services</u> | | | | | | | | |
| Total | 3,828 | 6.6 | 507 | 3.4 | 0 | 0.0 | 4,335 | 5.9 |
| Median | 0.1 | | 0.1 | | 0.0 | | 0.1 | |
| Mean | 24.5 | | 3.8 | | 0.0 | | 14.6 | |
| Standard Deviation | 164.2 | | 43.2 | | 0.0 | | 122.8 | |
| <u>Total</u> | | | | | | | | |
| Total | 58,426 | 100.0 | 14,904 | 100.0 | 75 | 100.0 | 73,405 | 100.0 |
| Median | 109.0 | | 30.2 | | 1.5 | | 57.5 | |
| Mean | 312.4 | | 83.3 | | 9.4 | | 196.3 | |
| Standard Deviation | 1,140.5 | | 165.1 | | 17.1 | | 821.8 | |
| Number of Facilities | 187 | | 179 | | 8 | | 374 | |

in the facility. Exhibit 131 shows the total, median, mean, and standard deviation of such encounters with Medicare beneficiaries in 1980 in facilities meeting all MMHD requirements, by type of facility and treatment environment. The information reported is the product of the number of beneficiaries served by a QMHP or when a QMHP was present in the facility, times the average number of encounters per ambulatory client served. As such, it is an approximation of Medicare beneficiary utilization of facilities meeting all MMHD requirements. The exhibit shows that:

- . The number of encounters made with Medicare beneficiaries by QMHPs or when QMHPs were present in the facility in an outpatient environment was 791,527, the mean number of encounters per facility was 3,032.7, and the median was 696.0
- . The number of days of partial hospitalization provided to Medicare beneficiaries by QMHPs or when QMHPs were present in the facility was 374,413, the mean number of days per facility was 1,593.2, and the median was 116.0

6. STATISTICAL COMPARISON OF DEMONSTRATION AND SURVEY SITES

In selecting the sites for this Demonstration as noted earlier, the Federal government made a policy decision that the sampling should be purposive. Consequently, an effort was made to select sites serving large numbers of Medicare beneficiaries relative to the universe of possible sites. This was done to ensure that an adequate number of beneficiaries were served under Demonstration conditions to test the effects of the parameters of the Demonstration. Because of this decision, a question naturally arises as to the generalizability of the results of the Demonstration to the universe of ambulatory mental health treatment facilities from which the sample of Demonstration sites was selected. The national survey was undertaken partly to address this question.

To examine whether the sample of Demonstration facilities was similar or dissimilar to the universe of such facilities, it was decided that the following criterion measure would be used for testing purposes:

EXHIBIT 131

HHS, Office of the Secretary

NUMBER OF ENCOUNTERS MADE WITH MEDICARE BENEFICIARIES
SERVED BY QMHPs OR WHEN QMHPs WERE PRESENT IN FACILITIES
MEETING ALL MMHD REQUIREMENTS

| Treatment Environment | Community Mental Health Centers | | Ambulatory Mental Health Clinics | | Partial Hospitalization Programs | | Total | |
|----------------------------------|---------------------------------------|---------|--|---------|--|---------|-----------|---------|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| <u>Outpatient Services</u> | | | | | | | | |
| Total | 643,204 | 66.8 | 147,803 | 70.8 | 520 | 6.9 | 791,527 | 67.2 |
| Median | 1,075.0 | | 488.0 | | 5.2 | | 696.0 | |
| Mean | 5,315.7 | | 1,103.0 | | 86.7 | | 3,032.7 | |
| Standard Deviation | 38,761.7 | | 2,129.2 | | 212.3 | | 26,463.4 | |
| <u>Partial Hospitalization</u> | | | | | | | | |
| Total | 306,700 | 31.9 | 60,700 | 29.0 | 7,012 | 93.1 | 374,412 | 31.7 |
| Median | 432.0 | | 1.0 | | 399.0 | | 116.0 | |
| Mean | 2,839.0 | | 501.7 | | 1,168.7 | | 1,593.2 | |
| Standard Deviation | 11,110.1 | | 1,455.5 | | 1,742.2 | | 7,676.7 | |
| <u>Emergency Services</u> | | | | | | | | |
| Total | 6,856 | 0.7 | 500 | 0.2 | 0 | 0.0 | 7,356 | 0.06 |
| Median | 9.0 | | 0.0 | | 0.0 | | 0.0 | |
| Mean | 80.7 | | 5.7 | | 0.0 | | 41.1 | |
| Standard Deviation | 205.6 | | 14.6 | | 0.0 | | 146.6 | |
| <u>Other Ambulatory Services</u> | | | | | | | | |
| Total | 5,976 | 0.6 | 0 | 0.0 | 0 | 0.0 | 5,976 | 0.5 |
| Median | 0.0 | | 0.0 | | 0.0 | | 0.0 | |
| Mean | 42.4 | | 0.0 | | 0.0 | | 42.4 | |
| Standard Deviation | 309.7 | | 0.0 | | 0.0 | | 309.7 | |
| <u>Total</u> | | | | | | | | |
| Total | 962,736 | 100.0 | 209,003 | 100.0 | 7,532 | 100.0 | 1,179,271 | 100.0 |
| Median | 1,035.0 | | 300.2 | | 133.0 | | 658.0 | |
| Mean | 5,730.6 | | 1,298.2 | | 941.5 | | 3,499.3 | |
| Standard Deviation | 41,633.1 | | 2,514.7 | | 1,604.1 | | 29,487.8 | |
| Number of Facilities | 168 | | 161 | | 8 | | 337 | |

$$\frac{\text{Total Medicare beneficiaries served in} \\ \text{ambulatory treatment environments}}{\text{Total facility ambulatory client caseload}}$$

This criterion measure was selected because it relates directly to how Demonstration facilities were selected. That is, it was expected that Demonstration facilities would serve a greater proportion of Medicare beneficiaries than a like measure for the universe of facilities. For the Demonstration facilities, these dates were reported on the QSR, and the quarter immediately prior to the start of the Demonstration was used for this analysis. The survey provided the data for the universe of facilities. Although the Demonstration facility data were for 3 months and the universe data for 12 months, there is no reason to believe that the differences in length of time would alter the proportions appreciably.

Exhibit 132 shows the median, mean, and standard deviation of the criterion measure by facility type and treatment environment. The exhibit shows that:

- . The average proportion of CMHC caseloads composed of beneficiaries was 9.3 percent, with a median of 4.5 percent.
- . The average proportion of AMHC caseloads composed of beneficiaries was 10.6 percent, with a median of 3.3 percent.
- . The average proportion of PHP caseloads composed of beneficiaries was 9.1 percent, with a median of 0.1 percent.

Overall, the average proportion of ambulatory mental health treatment facilities composed of Medicare beneficiaries was 10.0 percent, with a median of 3.7 percent.

Exhibit 133 shows similar data for Demonstration facilities as compared to the national survey. The exhibit shows that:

EXHIBIT 132

HHS, Office of the Secretary

PERCENTAGE OF MEDICARE BENEFICIARIES TO TOTAL CASELOAD---
ALL FACILITIES RESPONDING TO THE NATIONAL SURVEY

| Treatment Environment | Community Mental Health Centers | Ambulatory Mental Health Clinics | Partial Hospitalization Programs | Total |
|----------------------------------|---------------------------------------|--|--|-------|
| <u>Outpatient Services</u> | | | | |
| Median | 6.2% | 4.3% | 0.1% | 12.0% |
| Mean | 11.9 | 12.4 | 0.1 | 21.4 |
| Standard Deviation | 19.0 | 23.0 | 0.3 | |
| <u>Partial Hospitalization</u> | | | | |
| Median | 11.5 | 0.0 | 2.9 | 12.5 |
| Mean | 18.9 | 8.5 | 12.5 | 22.6 |
| Standard Deviation | 23.1 | 21.5 | 17.9 | |
| <u>Emergency Services</u> | | | | |
| Median | 3.2 | 0.0 | 0.0 | 7.2 |
| Mean | 11.1 | 5.2 | 0.0 | 19.0 |
| Standard Deviation | 22.6 | 16.6 | 0.0 | |
| <u>Other Ambulatory Services</u> | | | | |
| Median | 0.0 | 0.0 | 0.0 | 1.2 |
| Mean | 2.2 | 0.1 | 0.0 | 7.7 |
| Standard Deviation | 10.6 | 4.2 | 0.0 | |
| <u>Total</u> | | | | |
| Median | 4.5 | 3.3 | 0.1 | 3.7 |
| Mean | 9.3 | 10.6 | 9.1 | 10.0 |
| Standard Deviation | 17.4 | 21.7 | 16.0 | 20.0 |
| <u>Number of Facilities</u> | 249 | 369 | 13 | 631 |

EXHIBIT 133

HHS, Office of the Secretary

COMPARISON OF THE PERCENTAGE OF MEDICARE
BENEFICIARIES TO TOTAL CASELOAD SERVED IN
DEMONSTRATION AND NATIONAL SURVEY FACILITIES

| | <u>Demonstration Facilities</u> | <u>National Survey Facilities</u> |
|---|-------------------------------------|---------------------------------------|
| <u>Community Mental Health Centers</u> | | |
| Median | 7.3% | 4.5% |
| Mean | 12.4 | 9.3 |
| Standard Deviation | 9.9 | 17.4 |
| <u>Ambulatory Mental Health Clinics</u> | | |
| Median | 9.4 | 3.3 |
| Mean | 14.0 | 10.6 |
| Standard Deviation | 23.1 | 21.7 |
| <u>Partial Hospitalization Programs</u> | | |
| Median | 23.8 | 0.1 |
| Mean | 22.2 | 9.1 |
| Standard Deviation | 15.7 | 16.0 |
| <u>Total</u> | | |
| Median | 10.6 | 3.7 |
| Mean | 13.0 | 10.0 |
| Standard Deviation | 17.3 | 20.0 |
| <u>Number of Facilities</u> | 30 | 631 |

- . The average proportion of Demonstration CMHC caseloads composed of beneficiaries was 12.4 percent, with a median of 7.3 percent.
- . The average proportion of Demonstration AMHC caseloads composed of beneficiaries was 14.0 percent, with a median of 9.4 percent.
- . The average proportion of Demonstration PHP caseloads composed of beneficiaries was 22.2 percent, with a median of 23.8 percent.

Overall, the average proportion of Demonstration ambulatory mental health treatment facilities composed of Medicare beneficiaries was 13.6 percent, with a median of 10.6 percent.

It is clear from examination of Exhibit 133 that the Demonstration and survey data were not normally distributed. This, in conjunction with the fact that Demonstration facilities were not selected at random, meant that nonparametric statistics would be required to test for differences between the two facility populations. The Mann-Whitney U Test was chosen to test whether the two "samples" were from the same population, using the criterion measure. This test required, however, that the data be ordinal. Consequently, facilities were grouped as follows:

- . High--Proportions 0.051 and above
- . Medium--Proportions between 0.021 and 0.050
- . Low--Proportions 0.20 and below

These groupings were selected after analysis of the frequency distributions of the criterion measure for each "sample."

The procedure^{3/} for the Mann-Whitney U Test combined the two groups, and then facilities were ranked in order of increasing size. The test statistic U was computed as the number of times a criterion measure from group 1 preceded a criterion measure from group 2. The rationale for the test statistic is

^{3/} Hull, C. H., and N. H. Nie. SPSS Update: New Procedures and Facilities for Releases 7 and 8, New York: McGraw-Hill, 1979.

that if the "samples" were from the same population, the distribution of criterion measures from the two groups in the ranked list would be random. Alternatively, a nonrandom distribution would be indicated by an extreme value of U.

Exhibit 134 shows the results of the statistical analysis. As the exhibit shows, there was a Z-score of -3.8018, which is highly significant (p less than .0001). This means that, on the criterion measure, the Demonstration facilities were dissimilar from the universe of facilities from which Demonstration participants were selected. That is, Demonstration facilities, at the time the Demonstration began, had a significantly higher proportion of Medicare beneficiaries in their caseloads than respondents to the national survey. This means that Demonstration results should not be considered directly generalizable to the universe of ambulatory mental health treatment facilities from which Demonstration sites were selected. However, the survey results can be used to adjust, statistically, for this dissimilarity.

7. USE OF THE NATIONAL SURVEY RESULTS

One possible outgrowth of the MMHD and its evaluation may be a decision concerning whether or not to offer similar benefits to Medicare beneficiaries on a national basis. Prior to making this decision, however, it would be necessary to project the impact of such a change on utilization and cost to Medicare at the national level. This section describes how data on utilization and cost at the demonstration sites might be combined with information on the national beneficiary and provider populations to develop such projections.

(1) Theoretical Overview

The basis of the approach would be first to estimate the utilization of the demonstration mental health benefits at the national level and then to estimate the cost associated with the level of utilization. In general, the utilization of mental health benefits is a function of both supply and demand. Supply refers to the number of ambulatory mental health facilities meeting

EXHIBIT 134

HHS, Office of the Secretary

COMPARATIVE ANALYSIS OF DEMONSTRATION
AND NATIONAL SURVEY FACILITIES

| | Low Proportion of Medicare Beneficiaries | Medium Proportion of Medicare Beneficiaries | High Proportion of Medicare Beneficiaries | |
|----------------------------------|--|---|---|-----|
| National Survey Facilities | 241 | 126 | 264 | 631 |
| Demonstration Facilities | 4 | 2 | 24 | 30 |
| | 245 | 128 | 288 | |

U = 5,864.0

Z-score = -3.8018

2-tailed P = 0.0001

all or some combination of the salient MMHD requirements as shown earlier in this chapter, willing and able to provide MMHD covered services, and demand refers to the extent to which eligible Medicare Part B beneficiaries avail themselves of these same services. In the long run, presuming Medicare reimbursement rates were realistically set, supply, in most areas of the country, would be likely to adjust to meet demand. This process, however, would take some years. In the short and medium term, utilization may be restrained by the ability of the mental health system to meet demand. Our basic approach here would be to project demand and check, on a regional basis, whether local capacity existed to meet the projected demand. Thus, in some instances, local utilization may, in the short run, be supply constrained.

It must be recognized in developing projections of "demand" that the provider is not a passive participant in the decision to seek mental health treatment and the intensity of services used. Some traditional supply factors need to be considered in the demand estimation.

In summary, the overall utilization and cost projection model to be used could be expressed in terms of four progressive equations:

- (1) Short-Run Capacity = F_1 (QMHPs in eligible facilities, other variables)
- (2) Utilization Demand = F_2 (Beneficiaries and their characteristics, other variables)
- (3) Projected Utilization by regional locality = Minimum (Capacity, Utilization Demand)
- (4) Projected Cost = F_3 (Projected Utilization)

where F_1 , F_2 , and F_3 are functional relationships. The task would be to develop the precise nature of each of these functional relationships using the best available demonstration and national data. The following sections (2 through 5) correspond respectively to each of the four functional relationships enumerated above.

(2) Projection Of Short-Run Capacity

Supply refers to those factors influencing the ambulatory mental health provider population and the decision and ability to provide services under MMHD conditions. Although both supply and demand factors could be estimated separately, it is clear that, at least on an aggregate level, the utilization of MMHD benefits would be constrained by both. This section considers the projection of MMHD utilization through an analysis of supply (provider) variables.

The "potential" supply of MMHD benefits (S) could be expressed as the product of the "potential" number of providers (P_i) times the "potential" level of service each provider is capable of generating (L_i), summed over i providers:

$$(5) \quad \bar{S} = \sum_i P_i * L_i$$

where P_i refers to individual provider facilities and L_i refers to each facility's level of service capacity. Potential supply could, therefore, be estimated if the number of providers and their respective service capacities were known. Conforming to the national survey and MMHD classification scheme, the universe of potential providers could be categorized into three major types of facilities:

- . Community Mental Health Centers (denoted by the subscript c)
- . Ambulatory Mental Health Clinics (denoted by the subscript a)
- . Partial Hospitalization Facilities (denoted by the subscript p)

Because it would not be practical to measure the service capacity of every provider in the country, average capacities by type of facility would be estimated, reducing equation (5) to:

$$(6) \quad \bar{S} = (\bar{P}_c * \bar{L}_c) + (\bar{P}_a * \bar{L}_a) + (\bar{P}_p * \bar{L}_p)$$

where \bar{P} and \bar{L} would represent the number of providers and their average service capacity for each facility type, and \bar{S} would be an estimate of \bar{S} as specified in equation (5).

Equation (6) would model the maximum potential supply of services/benefits by combining the maximum number of potential providers with the maximum capacity by each such provider. In other words, it would be assumed that all potential services would be available to and utilized by Medicare beneficiaries. In reality, however, the actual supply would be reduced at any point in time by the following two additional factors:

- . The proportion of potential providers willing and able to satisfy basic MMHD participation requirements (Q)
- . The proportion of potential service/benefit capacity that could actually be made available to beneficiaries (C)

Modifying equation (6) to account for these two additional factors, "expected" utilization supply (US) could be expressed as follows:

$$(7) \quad US = [(\bar{P}_c * Q_c) (\bar{L}_c * C_c)] + [(\bar{P}_a * Q_a) (\bar{L}_a * C_a)] + [(\bar{P}_p * Q_p) (\bar{L}_p * C_p)] \text{ where}$$

US = Expected utilization Supply, as opposed to the maximum potential supply represented by S in equation (6)

\bar{P} = Number of potential providers in each facility category

\bar{L} = Potential average provider capacity (in terms of encounters) in each facility category

Q = Proportion of potential providers who satisfy basic MMHD requirements

C = Proportion of potential service/benefit capacity actually made available to beneficiaries

c,a,p = Facility categories (defined for equation (6))

Equation (7) would serve as the basis for projecting utilization of MMHD services/benefits from the supply perspective and corresponds to the function described in equation (1) in the theoretical overview. Three

methodological points are worth noting. First, the provider participation (Q) and capacity utilization (C) factors would be derived from demonstration data, adjusted as necessary to account for bias in the demonstration sample or anticipated changes in subsequent criteria for national expansion of the benefits. Second, the potential provider (\bar{P}) and capacity (\bar{L}) factors would be developed through a joint analysis of demonstration data, comparison site data, and national survey data. Third, it is important to realize that this approach would be subject to the following limitations:

- . There could be substitution effects, such as substituting fee-for-service care from private psychiatrists for CMHC care, which could result in the overestimation of capacity and, therefore, supply. However, there would not be information available from the demonstration by which to estimate the level of substitution effects and, thus, adjust utilization estimates.
- . There would be exogeneous variables that could have substantial impacts on the reasonableness of the estimates of capacity and supply. For example, a continued reduction in public mental health expenditures could reduce the amount of tax-based resources available for ambulatory mental health programs, thereby reducing capacity. Such variables are very difficult to predict in terms of either their occurrence or impact.

(3) Projection Of Utilization Demand

The projection of utilization from a demand perspective would be more difficult than projecting utilization supply for two major reasons. First, utilization demand is made up of two components--the number of beneficiaries availing themselves of MMHD benefits/services (or their probability of utilization) and the intensity or extent to which these beneficiaries use such benefits/services. The decision to use benefits under the MMHD setting comprises two quantifiable components: the first was the yes (1) or no (0) decision to use some service/benefit, and the second was the decision of how much of the service/benefit to use. These two components would be expected to be influenced by different sets of factors to be estimated using the MMHD evaluation data. An attempt would not be made to model the decision-making process, but, rather, to estimate the probability

that a service would be used based on established relationships with other client characteristics. Second, utilization demand embodies more qualitative factors and relationships, such as personal socioeconomic, behavioral, and health-related characteristics, which are harder to define and quantify. For these reasons, the model for projecting utilization demand would be more complicated than the utilization supply model embodied in equation (7). The estimation of the two components of utilization demand and the resolution of these estimates are described below.

Utilization Demand--Projecting The Number Of Beneficiaries

The population of Medicare Part B beneficiaries is the "base" upon which utilization rates would be applied to estimate national utilization. Because the utilization rates would be expected to vary for differing sociodemographic characteristics of beneficiaries, the utilization rates should be estimated separately for each subpopulation and applied accordingly. For example, younger individuals might use more services than older; women might use more than men; individuals with lower incomes might use more than those with higher incomes; individuals in the East might use more than in the West; and so on. Changes in the composition of the eligible population brought about by any changes in eligibility requirements and other factors would also have consequences for utilization of services and will have to be considered.

The simplest approach to projecting the number of beneficiaries nationwide in a specific subpopulation who would demand MMHD benefits/services (if they were available) would be to (1) compute the number of beneficiaries participating in the MMHD, (2) compute the eligible beneficiary population in the appropriate catchment/service areas, (3) compute the proportion of eligible beneficiaries utilizing (i.e., demanding) MMHD benefits/services at the demonstration sites, and (4) apply this proportion to the national eligible beneficiary population to derive projected numbers of beneficiary users. This methodology, although intuitively appealing at a glance, has major limitations. First, it requires that the demonstration

providers and beneficiaries be statistically representative of their respective national subpopulations, which was not the case. Second, it does not explicitly address the behavioral factors affecting the utilization decision or the relationship between utilization and beneficiary characteristics. A more appropriate and rigorous approach to projecting utilization demand is described below.

The likelihood that a given eligible beneficiary used the MMHD services/benefits would depend on the sociodemographic characteristics of the individual, such as age, sex, race, income, and geographic area of the country. Additionally, this probability would depend on external factors such as the level of familiarity with the services/benefits among the Medicare population. For example, we expected that, without conscious publicity efforts, the availability of the benefit would not be well known to the Medicare population. Even when efforts were made in some demonstration areas to publicize the program, a large number of potential users probably remained ignorant of the availability of the benefit, as was the case with the United Auto Workers' introduction of new mental health benefits. Knowledge of the mental health benefits under Medicare Part B depended largely on the efforts of the providers. Higher levels of "marketing effort" by the providers seemed to result in more recognition and utilization of the benefits.

In a national program, the probability of use by a beneficiary would also depend on the availability and characteristics of qualified providers. Many areas of the country are simply not served by the types of providers comprised in this demonstration, especially the partial hospitalization programs. Over the long term, the existence of the MMHD benefit might affect the number and distribution of qualified providers. However, for the foreseeable future, the available supply of services would constrain utilization in at least some areas of the country. Finally, the level of the benefit itself might influence the decision to initiate treatment. Experience with other populations suggests that lower coinsurance, higher limits, and expansion of eligible providers encourage more individuals to seek care.

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The likelihood that a given beneficiary would utilize MMHD benefits/services could, therefore, be estimated from the MMHD data. This likelihood is a function of (1) beneficiary characteristics, (2) provider characteristics, and (3) other relevant predetermined variables. Once estimated, the likelihood function could then be applied to known and/or estimated national distributions of beneficiaries and their characteristics to estimate both the number and characteristics of eligible beneficiaries who would be expected to utilize MMHD benefits/services if they were made available nationally.

To express this likelihood mathematically, let $U = 1$, if the beneficiary sought treatment under the demonstration, and $U = 0$ if not. The likelihood that $U = 1$, given the demographic characteristics of the beneficiary, marketing efforts by the provider, the availability of services in the area, the level of benefits, etc., could be estimated based on data collected in the demonstration sites. The likelihood (L) that a given beneficiary used the services/benefits could be expressed as:

$$(8) \quad L = \text{Prob} (U = 1 \mid \bar{X} \bar{Y} \bar{Z})$$

where \bar{X} is a vector of beneficiary characteristics (e.g., race, age, sex, income, etc.), \bar{Y} is a vector of provider characteristics (e.g., the number of QMHPs per beneficiary in the area, etc.), and \bar{Z} is a vector of other external factors (e.g., geographic location, level of publicity, economic conditions, etc.).

The actual list of variables to be included in this relationship would be determined by several factors:

- . The availability and quality of demonstration site data
- . The availability and quality of demonstration area data for the demonstration sites
- . The availability and quality of corresponding national data

- . The findings of the MMHD evaluation (the analytical hypotheses)
- . The results of multivariate analysis of candidate variables for utilization projection

It could be anticipated that multiple regression analysis would be the most promising technique for estimating the likelihood functions in equation (8). In addition, functional forms specifically designed for binary (0-1) variable estimation, such as logit or probit models, could be analyzed for their feasibility and potential value. However, alternative multivariate techniques could also be explored as supplements to and/or substitutes for regression analysis in quantifying this relationship; these techniques may include discriminant analysis, factor analysis, cluster analysis, or other appropriate methodologies.

In principle, it would be relatively straightforward to estimate the increase in the probability of service utilization resulting from the effects of the MMHD. It is this increased probability that would be required in order to estimate the utilization and cost resulting from nationwide expansion of the benefit package. The increased probabilities for each subpopulation could be estimated by taking the difference between the pre- and post-demonstration probabilities for the demonstration sites. Alternatively, differences in the estimated probabilities for the demonstration and matched comparison sites in the post-period could similarly be used, although this approach would be less desirable because the demonstration and comparison sites and beneficiary groups were not perfectly matched.

In practice, there would be a number of difficulties in estimating the increased likelihood of use of services/benefits for the national population of beneficiaries. First, the demonstration was not a "small-scale model" of potential national policy that might be expected to result following the demonstration. Most important, information dissemination regarding benefits would not parallel that expected to occur nationally. Also, patterns of seeking mental health care and referral patterns by physicians resulting from the expanded benefit package would take time to change and reach a

state of equilibrium. Much of the change in the probability of use might only appear over a longer period of time than the period of the demonstration.

Other problems include the following:

- . Identification of the population base from which a demonstration provider drew was difficult, especially in urban areas, where service areas were not distinct--as we noted in our analysis of demographic data from the demonstration.
- . The short time frame for the demonstration probably was not sufficient for the system to reach equilibrium. Attention to the rate of new cases in a facility during the period of the demonstration would provide information about whether the ultimate frequency of new cases in a population was being approached in the demonstration. For example, if the new cases continued to grow during the final phases of the demonstration, there would be little confidence that equilibrium had been approached--as we showed in our demographic analysis.

These limitations would need to be carefully considered in estimating the increased probabilities of using the services/benefits under the MMHD.

Utilization Demand--Projecting The Intensity Of Utilization

The second part of the utilization decision is the intensity of utilization for those eligible beneficiaries participating in the MMHD. Each beneficiary could be considered as having a demand function (curve) for services, dependent on the beneficiary's characteristics (such as income and age) and the price of such services. The MMHD benefit undoubtedly affected the price of services to the individual, with the lower coinsurance reducing in many instances the price and the higher limit extending the quantity of services over which the lower price applies. According to this demand model, the effect of an increase in the Medicare benefit on utilization would be reflecting properties of the demand curve, such as demand elasticity. If we were to follow this approach, the factors to be investigated as possible influences on the decision about the extent of treatment would be confined to influences on demand.

However, this demand model would capture only part of what is believed to be important in determining the extent of utilization of benefits. To illustrate this point, it is felt that the provider would not be considered a passive participant in the decision for initiation of services and the intensity of services to be used. This decision would best be considered as a mutual decision between the provider and the beneficiary. Thus, characteristics of the provider (supply-side factors) might also be important in determining the extent of utilization by individual beneficiaries. For example, the philosophical orientation of the treatment staff to long- or short-term therapy might be one such variable. Another might be the service capacity of the provider organization. An organization working at full capacity with a waiting list for treatment might be inclined to provide fewer services for more individuals than a facility not operating at full capacity.

When decisions regarding the intensity of services are viewed as a mutual agreement between provider and beneficiary, the interpretation of the effect of an increase in the benefit level becomes more complex. Any increase in the intensity of services in response to the benefit might be due to demand or supply effects; therefore, both would be considered.

The intensity of service utilization for a beneficiary could then be modeled as follows:

$$(9) \quad I = F(\bar{X} \bar{Y} \bar{Z})$$

where I would be a continuous or categorical variable measuring the intensity of MMHD benefit (e.g., number of visits per year), \bar{X} is again a vector of beneficiary characteristics, \bar{Y} is again a vector of provider characteristics, and \bar{Z} is again a vector of external variables (although these vectors are not necessarily the same as their counterparts in equation (8)). A number of multivariate techniques would again be explored for the purpose of estimating equation (9), with multiple regression analysis a likely candidate.

The dependence of I upon the independent variables by fitting a response surface, e.g., a multidimensional contingency table showing the average intensity of utilization of individuals in each cell, should be considered. The advantage of beginning this way would be that it would impose no functional restrictions on the relationships among the variables. Depending on the size of the total sample and the type of characteristics available from analyses, the description of the dependence might be summarized in a simpler functional form. Unimportant independent variable interactions could be eliminated in an analysis of variance or regression framework. In this way, the most important determinants of intensity of utilization would be isolated. It would be interesting to assess the relative strength of the "demand" and "supply" factors and the importance of the level of benefits. Information from the comparison sites would be useful in estimating the effect of the level of benefits on intensity of services.

As before, comparisons of the pre- and post-demonstration intensity of services and the demonstration versus matched comparison group intensities would provide estimates of possible increases resulting from the expanded benefit package. National survey utilization data could then be the benchmark upon which to apply the intensity measure.

Problems and limitations could arise from a number of sources in making such estimates:

- . To the extent that the level of benefits affected both the decision to enter treatment as well as the extent of treatment, a "selectivity bias" might be included in the estimates.
- . A relatively small sample might prevent development of reliable estimates for a large number of categories of eligible beneficiaries. The number of "observations" in a number of cells of the contingency table would be likely to be small, based upon some of the demonstration demographic analyses.
- . The demonstration does not provide as pure and scientific a test as one might desire. It was impossible to sort out some of the effects of the independent variables because some of the independent variables were highly collinear.

Once again, these limitations would need to be taken into account in considering projections of the intensity of service utilization.

Utilization Demand--Integration Of Two Components

Equation (8) represents a framework for estimating the likelihood that a beneficiary would demand MMHD benefits/services, whereas equation (9) represents a framework for estimating the intensity of MMHD benefits/services demanded by beneficiary users. The projection of utilization demand, therefore, would require that these two components be integrated; this could be accomplished in equation form as follows:

$$(10) \text{ UD} = \sum_x N(x) \cdot L(x) \cdot I(x)$$

where UD refers to the total demand for MMHD services (in units of benefits/services, N(x) represents the national population of beneficiaries with a set of x-characteristics, and L(x) and I(x) are defined in equations (8) and (9), respectively. Equation (10), therefore, represents the projection of utilization from the perspective of demand, corresponding to equation (2) in the theoretical overview.

(4) Projection Of Costs To Medicare For MMHD Utilization

The final step in the projection process would be to estimate the costs to Medicare of the benefits/services expected to be utilized by eligible beneficiaries if the MMHD were subsequently implemented on a national basis. Given the utilization measures described above, the cost projection methodology would conceptually be quite straightforward. Cost or charge per unit of service would be estimated from the experience of the providers in the demonstration; these unit costs would be developed for several types of services/benefits and might be allowed to vary by type of provider. Projected utilization would then be broken down, either explicitly or implicitly, into the same service (and, if necessary, provider) categories. The number of units of each type of service expected to be

utilized would then be multiplied by the corresponding unit cost or charge estimates to obtain total national costs (to Medicare) for each service category, and these category costs would be summed to obtain a total cost projection for implementing the expanded benefit package on a national basis. Coinsurance and benefit limits could also be considered. In equation form, this could be expressed as follows:

$$(11) \text{ TC} = \sum_s V_s * UC_s$$

where TC is the total cost to Medicare, V is the volume of services/benefits projected to be utilized by equation (11), UC is the unit cost for such services/benefits, and s denotes an individual service/benefit (and/or provider) category.

Implicit in this formulation is that the use of services by the Medicare beneficiaries would be small in relation to all services so that the cost or charge of a unit of care would be unaffected by the rate of Medicare use.

VII. PRELIMINARY OFFSET ANALYSIS

VII. PRELIMINARY OFFSET ANALYSIS

This chapter reports on the preliminary analysis of questions relating to the impacts of the demonstration on the financial offsets to Medicare. This preliminary analysis focuses on those questions answerable from demonstration databases and the Medicare Provider Analysis and Review Record (MEDPAR) database. Additional offset questions answerable from analysis of Medicare master payment records will be released as a separate addendum to this report, when analyses are completed.

There are five analysis questions addressed in this preliminary analysis:

- . Did Medicare beneficiaries begin to use mental health services for the first time under the waiver conditions in greater proportion than prior to the waiver?
- . Were there any changes in the types or intensity of services, or the sources of payment for such services by or on behalf of Medicare beneficiaries who entered treatment facilities prior to the waivers and continued treatment at the demonstration facilities on into some portion or all of the demonstration period?
- . Were there any changes in the amount of reimbursements attributable to given payer sources by or on behalf of Medicare beneficiaries who entered treatment facilities prior to the waivers and continued treatment at the demonstration facilities into some portion or all of the demonstration period?
- . Did Medicare beneficiaries shift their use of mental health services from traditional, "qualified" Medicare providers, i.e., inpatient hospitals, hospital outpatient departments, and physician offices, to the demonstration facilities subsequent to the waivers?
- . Were the costs to Medicare for mental health treatment in geographic areas served by demonstration facilities affected by the demonstration?

All of the above questions emphasize potential effects of the demonstration on Medicare relative to the use of Medicare-covered mental health benefits. Subsequent analyses, to be undertaken in the future, will address the question of the demonstration's effects on the use of all Medicare benefits.

1. DID MEDICARE BENEFICIARIES BEGIN TO USE MENTAL HEALTH SERVICES FOR THE FIRST TIME UNDER THE WAIVER CONDITIONS IN GREATER PROPORTION THAN PRIOR TO THE WAIVER?

There were two aspects to this question examined:

- . How was the proportion of demonstration facility caseloads of Medicare beneficiaries never having received mental health treatment affected by the demonstration?
- . Did the post-waiver population of beneficiaries without previous mental health treatment represent a "new" population?

With regard to the first question, Exhibit 60 showed a statistically significant increase in the proportion of beneficiaries never having received mental health treatment prior to the demonstration:

- . Baseline Only Group--34 percent
- . Baseline and Demonstration Group--18 percent
- . Demonstration Only Group--43 percent

With regard to the second question, the population of post-waiver beneficiaries without previous mental health treatment was a new population. Exhibit 62 showed that the vast majority of beneficiaries entering treatment in the demonstration who did not have previous mental health treatment were elderly, as opposed to disabled beneficiaries, and there were significant differences between the groups as follows:

- . Baseline Only Group--48 percent
- . Baseline and Demonstration Group--28 percent
- . Demonstration Only Group--61 percent

This "new" group of beneficiaries was also characterized as female, white, and living in their own home or apartment--a composite of the typical Medicare beneficiary.

2. WERE THERE ANY CHANGES IN THE TYPES OR INTENSITY OF SERVICES, OR THE SOURCES OF PAYMENT FOR SUCH SERVICES BY OR ON BEHALF OF MEDICARE BENEFICIARIES WHO ENTERED TREATMENT FACILITIES PRIOR TO THE WAIVERS AND CONTINUED TREATMENT AT THE DEMONSTRATION FACILITIES ON INTO SOME PORTION OR ALL OF THE DEMONSTRATION PERIOD?

Exhibits 18-52 showed changes in the patterns of types of personnel providing services, with increased percentages of beneficiaries receiving services from QMHPs; changes in the types of services received, with increased percentages of beneficiaries receiving individual and group therapy; and changes in the amount (intensity) of services received, with a decline in both the average number of ambulatory service encounters and hours of partial hospitalization per beneficiary per six-month period. We have noted previously, however, that the latter finding should be viewed cautiously because of the differences in data collection methods between the baseline and demonstration periods.

The source of payment for services provided beneficiaries changed, also, from the baseline to the demonstration period. In general, provision of care during the baseline period represented uncompensated care, with the costs borne by Federal, State, and local grant-in-aid funds. In the demonstration, the costs of care were borne almost entirely by Medicare.

3. WERE THERE ANY CHANGES IN THE AMOUNT OF REIMBURSEMENTS ATTRIBUTABLE TO GIVEN PAYER SOURCES BY OR ON BEHALF OF MEDICARE BENEFICIARIES WHO ENTERED TREATMENT FACILITIES PRIOR TO THE WAIVERS AND CONTINUED TREATMENT AT THE DEMONSTRATION FACILITIES INTO SOME PORTION OR ALL OF THE DEMONSTRATION PERIOD?

As we noted above, Medicare funds were used predominantly during the demonstration period to pay for the services rendered beneficiaries. This was in contrast to the baseline period in which grant-in-aid funds were used to pay

for the care. This represented a change in billing and collections policies and procedures on the part of demonstration facilities. In general, in the baseline, beneficiaries were accepted into care without an expected payer source and few billings of the beneficiary or a payer occurred. In the demonstration period, however, all beneficiaries had a payer source and nearly all beneficiaries (or a secondary payer, e.g., Medicaid) were billed for co-insurance amounts.

4. DID MEDICARE BENEFICIARIES SHIFT THEIR USE OF MENTAL HEALTH SERVICES FROM TRADITIONAL, "QUALIFIED" MEDICARE PROVIDERS, I.E., INPATIENT HOSPITALS, HOSPITAL OUTPATIENT DEPARTMENTS, AND PHYSICIAN OFFICES, TO THE DEMONSTRATION FACILITIES SUBSEQUENT TO THE WAIVERS?

We indicated above the effects of the demonstration in attracting previously untreated Medicare beneficiaries. For those individuals, there was no shift in the use of mental health services because there was no previous use of such services. Exhibits 60-62 did show, however, that there were statistically significant decreases in the percentage of beneficiaries having been previously treated in State mental hospitals and statistically significant increases in those beneficiaries having been previously treated in a general hospital psychiatric unit or in a private psychiatric practice. In reality, we do not consider the changes in the use of inpatient care to be qualitatively significant because it is reflective of the intensive, nationwide deinstitutionalization of public mental hospitals and the corresponding increase in use of general hospitals. Similarly, we believe that the increase in the proportion of beneficiaries having previously used private psychiatric practices was qualitatively significant but did not truly represent a shift in the locus of care; Exhibits 66-68 actually showed an increase in referrals from this locus of care during the demonstration.

5. WERE THE COSTS TO MEDICARE FOR MENTAL HEALTH TREATMENT IN GEOGRAPHIC AREAS SERVED BY DEMONSTRATION FACILITIES AFFECTED BY THE DEMONSTRATION?

The only source of data available to address this question at this point in time is MEDPAR. MEDPAR consists of a 20 percent sample of inpatient hospital discharges and contains detailed information on each hospital stay. The

MEDPAR records analyzed as part of the evaluation of MMHD were for 1979 through 1983, and included all discharges from general hospitals with a psychiatric diagnosis and all discharges from psychiatric hospitals. There were 272,939 such discharges in the database, as follows:

| | <u>General Short-Term Hospitals</u> | <u>Psychiatric Hospitals</u> |
|------|---|------------------------------|
| 1979 | 36,875 | 162 |
| 1980 | 41,047 | 66 |
| 1981 | 52,564 | 8 |
| 1982 | 57,582 | 13,453 |
| 1983 | 59,129 | 11,993 |
| | <u>247,257</u> | <u>25,682</u> |

A descriptive analyses which follow are based upon analysis of the 1979-1981 data. Subsequent across-year analyses are based upon the full five years of data.

Exhibit 135 shows a generic description of the database comparing the two types of facilities. The exhibit shows that the average age of beneficiaries discharged from psychiatric hospitals was lower than for discharges from general, short-term hospitals. However, the average length of stay, average number of covered days, and average total charges per stay were higher in psychiatric hospitals than in general, short-term hospitals.

The ratio of average covered days to average billed days for general, short-term hospitals was .95, compared to .98 for psychiatric hospitals. The ratio of average Medicare reimbursements^{1/} to average Medicare charges was .91 for general, short-term hospitals, compared to .65 for psychiatric hospitals.

Given the paucity of data on psychiatric hospitals, the analysis presented here will only be for the discharges from general, short-term hospitals. It should be noted that the discharges from such facilities are not necessarily from distinct psychiatric units in these facilities; Medicare makes no such record. Thus, discharges could have been from anywhere in such facilities.

^{1/} "Reimbursements" is somewhat of a misnomer under cost-related reimbursement. In general, these represent interim payments, subject to adjustment on annual cost reports.

EXHIBIT 135

HHS, Office of the Secretary

SELECTED MEDPAR DATA
COMPARING GENERAL SHORT-TERM AND
PSYCHIATRIC HOSPITALS

| Variables | General Short Term | Psychiatric |
|-------------------|--------------------|-------------|
| Age | 65.48 | 57.71 |
| Length of Stay | 13.23 | 14.97 |
| Covered Days | 12.61 | 14.67 |
| Total Charges | \$2,738.66 | \$2,854.31 |
| Amount Reimbursed | \$2,488.79 | \$1,849.25 |
| N | 130,486 | 236 |

Source: MEDPAR, 1979-1981.

(1) Descriptive Analysis

Exhibit 136 shows the age distribution of Medicare psychiatric discharges from general, short-term hospitals. The exhibit shows that 68 percent of the discharges were for beneficiaries 65 years and older. There were no differences in the age distributions across the three years.

Exhibit 137 shows the sex, race, and Medicare status distribution of Medicare psychiatric discharges from general, short-term hospitals. The exhibit shows:

- . Sex--53 percent of the discharges were female
- . Race--88 percent of the discharges were white
- . Medicare Status--68 percent of the discharges were aged, without chronic renal disease

These distributions are similar to the Baseline Only Group, which was, in turn, characteristic of the entire Medicare population using psychiatric care benefits. Also, there were no differences in the sex, race, and Medicare status distributions across the three years.

Exhibit 138 shows the length of stay distribution of Medicare psychiatric discharges from general, short-term hospitals. The exhibit shows that more than one-half of the discharges had a length of stay of 10 days or fewer; 31 percent had stays of 5 days or fewer. Exhibit 139 shows the covered days distribution of Medicare psychiatric discharges from general, short-term hospitals. The covered days are those for which Medicare would make some payment. Similar to Exhibit 138, this exhibit shows that the majority of beneficiaries (58 percent) had covered stays of 10 days or fewer. Exhibit 140 shows a covered day distribution by Medicare status. The exhibit shows remarkably similar distributions by Medicare status; the majority of discharges had covered day stays of 10 days or fewer, irrespective of Medicare status.

EXHIBIT 136

HHS, Office of the Secretary

MEDPAR AGE DISTRIBUTION
FOR GENERAL SHORT-TERM
HOSPITALS-NATIONAL

| Age | Percent |
|------------------|---------|
| 19 years or less | .01 |
| 20 - 29 years | 4.32 |
| 30 - 39 years | 6.79 |
| 40 - 49 years | 6.71 |
| 50 - 59 years | 8.77 |
| 60 - 64 years | 5.35 |
| 65 - 69 years | 20.28 |
| 70 - 79 years | 29.94 |
| 80 - 89 years | 15.50 |
| Over 90 years | 2.35 |
| Total | 100.00 |

Source: MEDPAR, 1979-1981.

EXHIBIT 137

HHS, Office of the Secretary

MEDPAR SEX, RACE, AND MEDICARE STATUS
DISTRIBUTIONS FOR GENERAL SHORT-TERM
HOSPITALS-NATIONAL

| Sex | Percent |
|--------|---------|
| Male | 47.35 |
| Female | 52.65 |
| Total | 100.00 |

| Race | Percent |
|---------|---------|
| White | 88.80 |
| Black | 8.12 |
| Other | .80 |
| Unknown | 2.28 |
| Total | 100.00 |

| Medicare Status | Percent |
|----------------------|---------|
| Aged without CRD | 68.04 |
| Aged with CRD | .10 |
| Disabled without CRD | 31.60 |
| Total | 100.00 |

Source: MEDPAR, 1979-1981.

EXHIBIT 138

HHS, Office of the Secretary

MEDPAR LENGTH OF STAY
DISTRIBUTION FOR GENERAL
SHORT-TERM HOSPITALS-NATIONAL

| Length of Stay | Percent | Cumulative Percent |
|----------------|---------|--------------------|
| 0 - 5 days | 31.49 | 31.49 |
| 6 - 10 days | 25.47 | 56.96 |
| 11 - 15 days | 14.70 | 71.66 |
| 16 - 20 days | 8.78 | 80.44 |
| 21 - 25 days | 6.90 | 87.34 |
| 26 - 30 days | 4.21 | 91.55 |
| 31 - 35 days | 2.52 | 94.07 |
| 36 - 50 days | 3.62 | 97.69 |
| 51 - 75 days | 1.66 | 99.35 |
| Over 76 days | .66 | 100.00 |

Source: MEDPAR, 1979-1981.

EXHIBIT 139

HHS, Office of the Secretary

MEDPAR COVERED DAYS DISTRIBUTION
FOR GENERAL SHORT-TERM
HOSPITALS-NATIONAL

| Covered Days | Percent | Cumulative Percent |
|---------------|---------|--------------------|
| 0 - 5 days | 32.04 | 32.04 |
| 6 - 10 days | 25.69 | 57.73 |
| 11 - 15 days | 14.81 | 72.53 |
| 16 - 20 days | 8.80 | 81.34 |
| 21 - 25 days | 6.90 | 88.24 |
| 26 - 30 days | 4.08 | 92.32 |
| 31 - 35 days | 2.43 | 94.75 |
| 36 - 50 days | 3.37 | 98.12 |
| 51 - 150 days | 1.88 | 100.0 |
| | | |

Source: MEDPAR, 1979-1981.

EXHIBIT 140

HHS, Office of the Secretary

MEDPAR COVERED DAYS BY MEDICARE
STATUS FOR GENERAL SHORT-TERM
HOSPITALS-NATIONAL

| Covered Days | Medicare Status | | | |
|---------------|------------------|----------------------|-------|---------|
| | Aged Without CRD | Disabled Without CRD | Other | Total |
| 0 - 5 days | 26,974 | 14,650 | 186 | 41,810 |
| % | 30.3 | 35.5 | 39.7 | 32.0 |
| 6 - 10 days | 23,977 | 9,438 | 103 | 33,518 |
| % | 27.0 | 22.9 | 21.0 | 25.7 |
| 11 - 15 days | 13,566 | 5,693 | 60 | 19,319 |
| % | 15.3 | 13.8 | 12.8 | 14.8 |
| 16 - 20 days | 7,863 | 3,591 | 33 | 11,487 |
| % | 8.9 | 8.7 | 7.0 | 8.8 |
| 21 - 25 days | 6,040 | 2,929 | 33 | 9,002 |
| % | 6.8 | 7.1 | 7.0 | 6.8 |
| 26 - 35 days | 5,681 | 2,789 | 31 | 8,501 |
| % | 6.4 | 6.8 | 6.6 | 6.5 |
| 36 - 50 days | 3,055 | 1,328 | 17 | 4,400 |
| % | 3.4 | 3.2 | 3.6 | 3.3 |
| 51 - 150 days | 1,622 | 821 | 6 | 2,449 |
| % | 1.8 | 2.0 | 1.3 | 1.9 |
| Total | 88,778 | 41,239 | 469 | 130,486 |
| % | 100.0 | 100.0 | 100.0 | 100.00 |

Source: MEDPAR, 1979-1981.

Exhibit 141 shows a total charge to Medicare distribution by Medicare status. Like covered days, the distributions were similar for each type of Medicare status. The seeming differences for chronic disease cases should be ignored because of the small n's. Exhibit 142 shows a comparable distribution for Medicare reimbursements. Once again, the distributions were similar.

(2) Across-Year Analysis

If offsets to the costs to Medicare were to occur as a result of the demonstration, one would expect to see either a decline or stabilizing in number of discharges, length of stay, covered days, charges, and reimbursements over time. Accordingly, the MEDPAR database for general, short-term hospitals was partitioned by year for those discharges with resident zip codes corresponding to the geographic areas served by demonstration facilities. There were 13,755 such discharges by year as follows:

- . 1979--1,659 discharges
- . 1980--1,874 discharges
- . 1981--2,515 discharges
- . 1982--3,899 discharges
- . 1983--3,808 discharges

Areas served by demonstration facilities represented approximately 5 percent of this MEDPAR database.

Below is a summary of the total days billed to Medicare, total Medicare covered days, total charges billed to Medicare, and total Medicare reimbursements for those discharges, by year:

| | <u>1979</u> | <u>1980</u> | <u>1981</u> | <u>1982</u> | <u>1983</u> |
|----------------------|-------------|-------------|-------------|-------------|-------------|
| Total Days Billed | \$ 24,912 | \$ 28,668 | \$ 40,102 | \$ 100,429 | \$ 82,913 |
| Total Covered Days | 23,254 | 27,760 | 37,192 | 61,231 | 60,908 |
| Total Charges | 4,778,968 | 6,235,458 | 10,011,767 | 17,620,867 | 20,090,141 |
| Total Reimbursements | 4,332,203 | 5,638,847 | 9,201,153 | 14,344,117 | 16,850,547 |

EXHIBIT 141

HHS, Office of the Secretary

MEDPAR TOTAL CHARGES BY
MEDICARE STATUS FOR GENERAL
SHORT-TERM HOSPITALS-NATIONAL

| Total Charges | Medicare Status | | | |
|-------------------|------------------------|----------------------------|-------|---------|
| | Aged Without CRD | Disabled Without CRD | Other | Total |
| \$399 or less | 5,291 | 4,285 | 27 | 9,603 |
| % | 6.0 | 10.4 | 5.8 | 7.4 |
| \$400 - \$799 | 12,557 | 6,362 | 61 | 18,980 |
| % | 14.1 | 15.4 | 13.0 | 14.5 |
| \$800 - \$1,499 | 20,806 | 8,671 | 57 | 29,534 |
| % | 23.4 | 21.0 | 12.2 | 22.5 |
| \$1,500 - \$2,499 | 18,329 | 7,590 | 79 | 25,998 |
| % | 20.6 | 18.4 | 16.8 | 19.9 |
| \$2,500 - \$3,999 | 14,201 | 6,405 | 86 | 20,692 |
| % | 16.0 | 15.5 | 18.3 | 15.9 |
| \$4,000 - \$5,999 | 8,719 | 4,149 | 73 | 12,941 |
| % | 9.8 | 10.1 | 15.6 | 10.0 |
| \$6,000 - plus | 8,875 | 3,777 | 86 | 12,738 |
| % | 10.0 | 9.2 | 18.3 | 9.8 |
| Total | 88,778 | 41,239 | 469 | 130,486 |
| % | 100.0 | 100.0 | 100.0 | 100.00 |

Source: MEDPAR, 1979-1981.

EXHIBIT 142

HHS, Office of the Secretary

MEDPAR MEDICARE REIMBURSEMENTS BY
MEDICARE STATUS FOR GENERAL SHORT-TERM
HOSPITALS-NATIONAL

| Total Charges | Medicare Status | | | |
|-------------------|------------------------|----------------------------|-------|---------|
| | Aged Without CRD | Disabled Without CRD | Other | Total |
| \$399 or less | 11,804 | 7,494 | 67 | 19,365 |
| % | 13.3 | 18.2 | 14.2 | 15.3 |
| \$400 - \$799 | 13,707 | 5,906 | 54 | 19,667 |
| % | 15.4 | 14.3 | 11.5 | 15.1 |
| \$800 - \$1,499 | 18,596 | 7,506 | 79 | 26,181 |
| % | 20.9 | 18.2 | 16.8 | 20.2 |
| \$1,500 - \$2,499 | 16,098 | 6,609 | 79 | 22,786 |
| % | 18.1 | 16.0 | 16.8 | 17.5 |
| \$2,500 - \$3,999 | 12,598 | 5,680 | 76 | 18,354 |
| % | 14.2 | 13.8 | 16.2 | 14.2 |
| \$4,000 - \$5,999 | 7,829 | 3,891 | 52 | 11,772 |
| % | 8.8 | 9.4 | 11.1 | 9.1 |
| \$6,000 - plus | 8,146 | 4,153 | 62 | 12,361 |
| % | 9.2 | 10.1 | 13.2 | 9.4 |
| Total | 88,778 | 41,239 | 469 | 130,486 |
| % | 100.0 | 100.0 | 100.0 | 100.00 |

Source: MEDPAR, 1979-1981.

Exhibit 143 shows these same measures and their mean, standard deviation, and range. Review of the exhibit illustrates that the distributions of these measures were highly variable.

In order to examine whether the demonstration appears to have impacted on any of these measures, it was necessary to manipulate the data in a variety of ways:

- . For number of discharges, the discharge rate per 100,000 Medicare enrollees living in the geographic areas served by demonstration facilities was calculated to adjust for changes in the Medicare population "at risk" of being hospitalized.
- . For billed days and covered days, an identical adjustment was made.
- . For billed charges and reimbursements, the measures were adjusted for population change and inflation (using the health care component of the Consumer Price Index).

In addition, the data previously reported in this chapter were multiplied by five (5), reflecting the fact that MEDPAR is a 20 percent sample. Exhibit 144 shows a comparison of each of these measures for the demonstration areas and nationally, after adjustments. Each of the comparisons is described separately, below.

Discharges Per 100,000 Medicare Enrollees

From Exhibit 144, it is striking that the number of discharges with a psychiatric disorder from hospitals per 100,000 Medicare enrollees was nearly twice as high nationally than in the demonstration areas. Below, we show the percentage changes by year:

| | <u>1979- 1980</u> | <u>1980- 1981</u> | <u>1981- 1982</u> | <u>1982- 1983</u> |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Demonstration Areas | +8.4% | +26.5% | +47.7% | -7.0% |
| National | +9.0% | +25.7% | +31.0% | -1.8% |

HHS, Office of the Secretary

SELECTED MEDPAR DATA FOR
DEMONSTRATION AREAS

| VARIABLE | 1979 | 1980 | 1981 | 1982 | 1983 |
|--------------------|----------------|-----------------|----------------|----------------|----------------|
| Length of Stay | | | | | |
| Mean | 15.0 days | 15.3 days | 15.9 days | 25.8 days | 21.8 days |
| Standard Deviation | 17.8 days | 14.5 days | 18.7 days | 71.1 days | 53.4 days |
| Range | 1 - 371 days | 1 - 151 days | 1 - 380 days | 1 - 379 days | 1 - 398 days |
| Covered Days | | | | | |
| Mean | 14.0 days | 14.8 days | 14.8 days | 15.7 days | 16.0 days |
| Standard Deviation | 13.1 days | 13.5 days | 14.4 days | 15.9 days | 16.1 days |
| Range | 1 - 108 days | 1 - 95 days | 1 - 135 days | 1 - 154 days | 1 - 150 days |
| Total Charges | | | | | |
| Mean | \$ 2,880 | \$ 3,327 | \$ 3,980 | \$ 4,519 | \$ 5,276 |
| Standard Deviation | \$ 3,299 | \$ 3,541 | \$ 5,092 | \$ 5,589 | \$ 6,166 |
| Range | \$ 84 - 33,150 | \$ 76 - 35,482 | \$ 98 - 67,717 | \$ 0 - 112,601 | \$ 0 - 238,336 |
| Reimbursements | | | | | |
| Mean | \$ 2,611 | \$ 3,009 | \$ 3,659 | \$ 3,679 | \$ 4,425 |
| Standard Deviation | \$ 2,752 | \$ 3,191 | \$ 4,279 | \$ 4,423 | \$ 5,175 |
| Range | \$ 0 - 19,446 | \$ 0 - \$29,908 | \$ 0 - 38,910 | \$ 0 - 111,850 | \$ 0 - 104,552 |

Source: MEDPAR, 1979-1983

HHS, Office of the Secretary
 DEMONSTRATION AREA AND NATIONAL
 COMPARISONS OF MEDPAR DATA

| VARIABLE | 1979 | 1980 | 1981 | 1982 | 1983 |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Discharges per 100,000 enrollees | | | | | |
| • Demonstration Areas | 359.2 | 389.5 | 492.9 | 727.8 | 677.0 |
| • National | 670.6 | 731.2 | 919.3 | 1,240.7 | 1,218.0 |
| Billed days per 100,000 enrollees | | | | | |
| • Demonstration Areas | 5,393.5 | 5,958.4 | 7,860.1 | 18,746.9 | 14,740.2 |
| • National | 8,755.2 | 9,508.7 | 12,442.2 | 25,512.4 | 23,337.4 |
| Covered days per 100,000 enrollees | | | | | |
| • Demonstration Areas | 5,034.5 | 5,769.7 | 7,289.7 | 11,429.9 | 10,828.2 |
| • National | 8,282.1 | 9,288.5 | 11,701.7 | 17,569.0 | 17,448.1 |
| Billed charges per 100,000 enrollees* | | | | | |
| • Demonstration Areas | \$1,034,593 | \$1,149,538 | \$1,507,063 | \$2,068,941 | \$1,817,949 |
| • National | \$1,533,775 | \$1,692,226 | \$2,228,538 | \$3,102,604 | \$2,724,573 |
| Reimbursements per 100,000 enrollees* | | | | | |
| • Demonstration Areas | \$ 937,927 | \$1,039,550 | \$1,385,042 | \$1,684,204 | \$1,524,799 |
| • National | \$1,395,471 | \$1,550,686 | \$2,013,069 | \$2,459,292 | \$2,224,039 |

* Adjusted for population change and inflation (for 1980, 1981, 1982, and 1983).

Source: MEDPAR, 1979-1983.

Recent, ongoing research by the National Institute of Mental Health confirms some of these findings.^{2/} The NIMH research has shown that in geographic areas (catchment areas) with organized mental health treatment settings such as CMHCs, the rate of psychiatric hospitalization particularly in State mental hospitals is lower than in areas without such settings. The research also shows that the availability of partial hospitalization is the key variable explaining such differences.

Billed Days Per 100,000 Medicare Enrollees

The average length of stay for beneficiary discharges with a psychiatric diagnosis was higher in demonstration areas than nationally. However, Exhibit 144 shows that when length of stay in terms of billed days per 100,000 Medicare enrollees is examined, the measure was substantially higher nationally than in demonstration areas. Below, we show the percentage changes per year:

| | <u>1979- 1980</u> | <u>1980- 1981</u> | <u>1981- 1982</u> | <u>1982- 1983</u> |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Demonstration Areas | +10.5% | +31.0% | +238.5% | -21.4% |
| National | +8.6% | +30.9% | +205.0% | -8.5% |

The above percentages show that there was large, comparable growth in billed days between the demonstration areas and nationally, except for the last portion of the Demonstration Period where there was an actual decline in billed days with the decline being greater in the demonstration areas.

The ongoing NIMH research described above also shows that the number of days hospitalized for a psychiatric disorder is lower in catchment

^{2/} Taube, C. and H. Goldman. Personal correspondence, 1985.

areas with organized mental health treatment settings.^{3/} Once again, the availability of partial hospitalization is the key explanatory variable.

Covered Days Per 100,000 Medicare Enrollees

The average number of covered days for beneficiary discharges with a psychiatric diagnosis from general, short-term hospitals was higher in demonstration areas than nationally. However, Exhibit 144 shows that covered days per 100,000 Medicare enrollees were substantially higher nationally than in demonstration areas. Below, we show the percentage changes by year:

| | <u>1979- 1980</u> | <u>1980- 1981</u> | <u>1981- 1982</u> | <u>1982- 1983</u> |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Demonstration Areas | +14.6% | +26.3% | +156.8% | -5.3% |
| National | +12.2% | +29.1% | +150.1% | -0.7% |

The above percentages show that there was large, comparable growth in covered days between the demonstration areas and nationally, except for the last portion of the Demonstration Period where there was a decline in covered days with the decline being greater in the demonstration areas.

Billed Charges Per 100,000 Medicare Enrollees

The average billed charges per discharge were higher in the demonstration areas than nationally. However, Exhibit 144 shows that billed charges per 100,000 Medicare enrollees were substantially higher nationally than in the demonstration areas. Below, we show the percentage change by year:

| | <u>1979- 1980</u> | <u>1980- 1981</u> | <u>1981- 1982</u> | <u>1982- 1983</u> |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Demonstration Areas | +11.1% | +31.1% | +37.2% | -12.1% |
| National | +10.2% | +31.7% | +39.2% | -12.2% |

^{3/} Ibid.

The above percentages show that there was large, comparable growth in billed charges between the demonstration areas and nationally, except once again in the latter portion of the Demonstration Period.

Reimbursements Per 100,000 Medicare Enrollees

The average Medicare reimbursements per discharge were higher in the demonstration area than nationally. However, Exhibit 144 shows that reimbursements per 100,000 Medicare enrollees were substantially higher nationally than in the demonstration areas. Below, we show the percentage change by year:

| | <u>1979- 1980</u> | <u>1980- 1981</u> | <u>1981- 1982</u> | <u>1982- 1983</u> |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Demonstration Areas | +10.3% | +33.4% | +21.6% | -9.5% |
| National | +11.1% | +29.8% | +22.2% | -9.6% |

The above percentages show that there was large, comparable growth in Medicare reimbursements between the demonstration areas and nationally, except once again in the latter portion of the Demonstration Period.

(3) Summary

These data show that the demonstration had no apparent effects on mental health offsets to the Medicare program using the MEDPAR dataset, in terms of the percentage increases in billed and covered days per 100,000 Medicare enrollees, and in billed charges to Medicare and Medicare reimbursements per 100,000 Medicare enrollees. However, it is noteworthy that all four measures of the use of Medicare inpatient mental health benefits were 40 to 60 percent lower in demonstration areas than nationally in both the pre-waiver and post-waiver periods. This finding confirms ongoing research by the National Institute of Mental Health showing lower use of hospitalization in geographic areas served by organized ambulatory mental health treatment settings, with the availability of partial hospitalization being the key explanatory variable. NIMH attributes its findings to the substitution of outpatient care for inpatient care in such geographic areas.

It should be noted, however, that the MEDPAR dataset's representativeness is unknown so that the findings may be masked in some ways by this. In addition, the reader should not be startled by some of the rather large percentage increases reported in this section; they are not entirely out of line with percentage increases in Medicare as a whole, e.g., 16.7 percent annual compound growth rate for Medicare reimbursements.^{4/} However, the percentage decreases for 1982-1983 begin to show a new trend in decreased hospitalization in preparation for and as a result of Medicare prospective payment.

6. SUMMARY

It is clear that the demonstration reached a new, previously untreated Medicare population. For these individuals, there could not have been compensatory savings to the Medicare program for the provision of mental health services to this population, or shifts away from traditional providers of mental health care. This was also reflected in the MEDPAR analysis which showed no discernible impacts of the demonstration on the use of Medicare Part A benefits for inpatient treatment of a psychiatric disorder. Yet, the MEDPAR analysis did show markedly lower use of Medicare inpatient mental health benefits in the demonstration areas between the pre-waiver and post-waiver periods. This finding is consistent with NIMH research showing reduced use of inpatient in geographic areas served by organized ambulatory mental health treatment settings, with the availability of partial hospitalization being the key explanatory variable. It should be noted, however, that MEDPAR may not be an appropriate, definitive dataset to test the offset question because of its unknown representativeness, and the fact that it was focused exclusively on the cost of inpatient mental health care to the Medicare program. There is considerable research available showing that coverage of a mental health benefit reduces or slows the use of total health services. Subsequent analysis on claims data will examine this more fully, the results of which will be issued as an addendum to this report.

^{4/} Social Security Bulletin: Annual Statistical Supplement, 1983, SSA Publ. No. 13-11700.

VIII. CONCLUSIONS

VIII. CONCLUSIONS

The Medicare Mental Health Demonstration was conceived and implemented principally in response to findings and recommendations of the President's Commission on Mental Health.^{1/} The findings of the President's Commission were that Medicare failed to provide adequate coverage for ambulatory mental health care for the aged and disabled because of limitations on benefits for such care and large deductibles, premiums, and co-payments. The implication was that Medicare enrollees--both the aged and disabled--had difficulty accessing needed ambulatory mental health care due to these limitations. Therefore, the President's Commission recommended specific changes to Medicare to enhance accessibility:

- . Giving provider status to community mental health centers and other organized systems of ambulatory mental health care;
- . Increasing the allowable reimbursement for ambulatory mental health care from \$250 to \$750 per beneficiary in any calendar year;
- . Reducing the applicable co-payment for ambulatory mental health care from 50 to 20 percent, thus putting such care on a par with care for physical illnesses with respect to co-payments; and
- . Allowing two days of partial hospitalization to be covered for each day of inpatient care coverage under Medicare Part A.

At the same time the President's Commission was undertaking its work, the then Department of Health, Education, and Welfare (HEW) was considering, as required by Public Law 95-210, the advantages and disadvantages of extending Medicare coverage to alcohol, drug abuse and mental health centers. The

^{1/} President's Commission on Mental Health. Report to the President, 1978.

required report to Congress cited a number of factors in the use of existing mental health services by the elderly^{2/}:

- . Limitations on Medicare coverage for mental health services;
- . Costs of mental health services;
- . A reluctance of the elderly to seek psychiatric care;
- . A tendency of the elderly to define problems as physical rather than mental; and
- . Inadequate training of mental health professionals to serve the elderly.

HEW established the HEW Task Force on the Report to the President from the President's Commission on Mental Health to consider the findings and recommendations of the President's Commission. The HEW Task Force recommended that the HEW Secretary prepare legislation to implement the recommendations pertaining to Medicare and, simultaneously, initiate a series of research and demonstration projects involving reimbursement of a limited number of community mental health centers and other organized systems of ambulatory mental health care.^{3/}

The then HEW Secretary, Joseph Califano, chose to initiate research and demonstration projects, but not to introduce legislation. A principal factor driving the decision was concern about the potential costs of the recommended changes. Thus, activities were begun to develop and implement the Demonstration.

The Demonstration consisted of a series of waivers designed to increase accessibility:

^{2/} Department of Health, Education and Welfare. Report Required by P.L. 95-210 on the Advantages and Disadvantages of Extending Medicare Coverage to Mental Health, Alcohol, and Drug Abuse Centers, 1978.

^{3/} Report of the HEW Task Force on Implementation of the Report to the President from the President's Commission on Mental Health, December 15, 1978, C8-C-14.

- . Granting of provider status to organized systems of ambulatory mental health care--community mental health centers, ambulatory mental health clinics, and free-standing partial hospitalization programs--with specific conditions of participation established for such facilities;
- . Eliminating the annual deductible;
- . Reducing the co-payment to 20 percent of charges;
- . For one-half of the community mental health centers and ambulatory mental health clinics in the Demonstration, increasing the allowable reimbursement based upon charges to \$750 per beneficiary in any calendar year; and no limit for the other facilities;
- . Covering partial hospitalization services in community mental health centers and free-standing partial hospitalization programs on an unlimited basis; and
- . Changing the mode of reimbursement from charge-related reimbursement to cost-related reimbursement, conforming to the manner in which "facilities" were paid by Medicare.

Policy questions changed in emphasis from the time the Demonstration was originally conceptualized. Originally, the emphasis from a policy perspective was on the following questions:

- . Could organized systems of ambulatory mental health care meet the conditions of participation of the Demonstration?
- . Would the waivers increase accessibility to ambulatory mental health care for Medicare enrollees?
- . How much would the waivers cost the Medicare program in terms of benefit dollars?

Subsequent to the demonstration being mounted, however, a major policy question posed was the extent to which the demonstration benefits would result in compensatory savings to Medicare for other health care.

This chapter summarizes the results of the Demonstration relative to these policy questions, and incorporates other research where relevant.

1. WERE ORGANIZED SYSTEMS OF AMBULATORY MENTAL HEALTH CARE ABLE TO MEET THE CONDITIONS OF PARTICIPATION OF THE DEMONSTRATION?

Facilities participating in the Medicare Mental Health Demonstration were able to meet the conditions of participation established for the Demonstration by the Department of Health and Human Services--physician supervision, supervision by Qualified Mental Health Professionals (QMHPs), provision of covered services, maintenance of requisite clinical records, and operation of a utilization review program.

In order to meet the conditions of participation and to file requisite bills and cost reports, participating facilities needed to make few changes. The most frequent changes noted were: (1) an increase in psychiatrists' time, to comply with physician supervision requirements; (2) the addition of QMHPs or assignment of new responsibilities to them, to meet the QMHP supervision requirements; (3) the expansion of clinical recordkeeping activities; (4) the establishment of a utilization review program; and (5) the addition of administrative staff to perform billing and cost reporting activities.

From the conduct of the national survey, it was learned that about 60 percent of the existing organized systems of ambulatory mental health care believed that they could meet the conditions of participation of the demonstration, and that 78 percent of such facilities were already billing Medicare for some covered services.

2. DID THE WAIVERS INCREASE ACCESSIBILITY TO AMBULATORY MENTAL HEALTH CARE FOR MEDICARE ENROLLEES?

Accessibility to ambulatory mental health services by Medicare enrollees was increased at the Demonstration facilities. In the two-year period prior to the Demonstration (Baseline Period), 186 per 100,000 Medicare enrollees living in areas served by the Demonstration facilities were actually served by the Demonstration facilities. The Baseline Period utilization rate was precisely the same as that in an earlier study of enrollee utilization of outpatients' mental

health benefits under Medicare.^{4/} In the Demonstration Period, this rate increased to 377 per 100,000 Medicare enrollees. This was a utilization rate of 0.2 percent and 0.4 percent by enrollees, in the Baseline and Demonstration Periods, respectively.

The increased use of Demonstration facilities by Medicare beneficiaries during the Demonstration Period was due largely to an influx of elderly beneficiaries, characterized as female, white, and never having been previously treated for a mental disorder. This is also a good characterization of the Medicare population as a whole. This was in contrast to the Baseline Period, in which the majority of beneficiaries served were under the age of 65.

For the Medicare program as a whole, it was estimated that 1.2 percent of the Medicare beneficiary population--those enrollees using any Medicare benefits--submitted bills to Medicare for ambulatory psychiatric care during 1981.^{5/} For the control group for the Colorado Clinical Psychology/Expanded Mental Health Benefits Experiment, 3.6 percent of the beneficiary population used ambulatory mental health care charged to Medicare any time during the experiment, although it should be noted that this study population was disproportionately weighted to users of Part B mental health services in the baseline period for the experiment.^{6/}

For the United States as a whole, slightly less than 2 percent of the population has been shown to use specialty mental health providers, with elderly persons having the lowest utilization rate.^{7/} This is in keeping with recent

^{4/} The Advisory Panel of Financing Mental Health Care, American Hospital Association, National Institute of Mental Health. Financing Mental Health Care in the United States: A Study of Assessments of Issues and Arrangements, DHEW Publication No. (ASM) 73-9117, 1973.

^{5/} Birkmaier, J. Internal memorandum, Health Care Financing Administration, July 16, 1982.

^{6/} McCall, N., S. Parker, and T. Rice. Evaluation of the Colorado Clinical Psychology/Expanded Mental Health Benefits Experiment, SRI International, 1981.

^{7/} Horgan, C. M. "Use and Expenditure Patterns for Ambulatory Mental Health Services," Data Preview Series, National Center for Health Services Research, 1984.

epidemiologic data showing the lowest prevalence rates of mental disorders as being among the elderly^{8/}, although the President's Commission deemed this population underserved as did the General Accounting Office.^{9/} Even in experimental efforts, use of ambulatory mental health services has been higher among younger populations.^{10/}

The utilization rates cited for the Medicare Mental Health Demonstration are only for use of the services of Demonstration facilities; they do not include use of any other Part B benefits for mental health care. Undoubtedly, the total use of Part B mental health benefits would be somewhat higher in both the Baseline and Demonstration Periods. Nevertheless, the actual increased rate of Medicare enrollee use of Demonstration facilities was noteworthy and to be expected, although this was not done at the expense of other clients. Overall, the total caseloads of Demonstration facilities grew throughout the Demonstration, but the proportion of Medicare beneficiaries served did not increase. Also, as Krinzay has noted,^{11/} the "... availability of insurance financing does not entice an excessive number of people to seek psychiatric treatment," which was certainly borne out in the Medicare Mental Health Demonstration.

Accessibility to mental health care can also be viewed relative to the amount of mental health services used by a given population. The encounters per beneficiary were comparable between the Demonstration facilities in the Baseline Period and Comparison facilities. Also, the number of service encounters per beneficiary

^{8/} Myers, J. K., et al. "Six-Month Prevalence of Psychiatric Disorders in Three Communities," Archives of General Psychiatry, 4, (10), 1984, 959-967.

^{9/} U.S. General Accounting Office. The Elderly Remain in Need of Mental Health Services, GAO/HRD-82-112, 1982.

^{10/} Wells, K. B. Cost Sharing and the Demand for Ambulatory Mental Health Services, RAND, R-2960-HHS, 1982.

^{11/} Krinzay, J. "Federal Employees' Experience as a Guide to the Cost of Insuring Psychiatric Services in the Various States," American Journal of Psychiatry, 139, 866-871, 1982.

in the Demonstration Period was consistent with national data on the average number of visits for ambulatory mental health treatment^{12/} and consistent with the use of mental health Part B benefits in the Colorado Clinical Psychology study population.^{13/}

The types of services provided and the providers of services changed from the Baseline to the Demonstration Periods. During the Demonstration Period, there was an increase in the proportion of beneficiaries receiving individual therapy, group therapy, partial hospitalization, and other services. There was a corresponding decrease in the proportion of beneficiaries receiving medication therapy, psychiatric/psychological examinations, and other therapeutic services. There were significant increases in the proportion of beneficiaries receiving services from QMHP psychologists, psychiatric social workers, nonpsychiatric physicians, and counselors. These findings were also true when the distribution of service encounters was examined. These findings were confirmed by the comparison group which provided services comparable to those provided by Demonstration facilities in the Baseline Period. Shifts in the types of services provided reflects the change in the patient population to elderly beneficiaries with less severe illness. The change in the types of providers reflects the ability of the facilities to alter service provision for reimbursement purposes.

3. HOW MUCH DID THE WAIVERS COST THE MEDICARE PROGRAM IN TERMS OF BENEFIT DOLLARS?

The following data suggest that while the overall cost of the Demonstration was substantial, the costs were in line with payers offering similar benefits. Thus, neither beneficiaries nor providers took undue advantage of the waivers.

Overall, \$10,840,697 was paid out under the Demonstration over its two-year period--\$6,008,668 (55 percent) to CMHCs, \$2,274,074 (21 percent) to AMHCs, and \$2,557,952 (24 percent) to PHPs. This translates to a cost per enrollee of \$4.25 and a cost per beneficiary using the Demonstration of \$1,020 or \$510 for each year of the Demonstration--by simply dividing by two.

^{12/} Horgan, C. M. Op. Cit.

^{13/} McCall, N., S. Parker, and T. Rice. Op. Cit.

There are no comparable data to compare the cost of the waivers to either the overall cost to Medicare for ambulatory mental health treatment or to another population, because the Demonstration paid facilities on a cost-related basis. No other payer has ever reimbursed such treatment on such a basis, so that any comparison involves cost-based reimbursement versus charge-based reimbursement.

In Fiscal Year 1981, Medicare made reimbursements of \$115 million to psychiatrists and psychologists and \$45 million to hospital outpatient departments for outpatient psychiatric care.^{14/} This translates to \$325 per beneficiary for the psychiatrists'/psychologists' services, and \$452 per beneficiary when hospital outpatient services are included. Participants in the Colorado Clinical Psychologist Experiment had an average of \$112 in mental health Part B allowed charges, although the experiment attracted few participants.^{15/}

On a national basis for the entire U.S. population, the mean expense per person for ambulatory mental health services from specialty providers (for persons with such an expense in 1977) was \$215.^{16/} For participants in the Rand Health Insurance Study, the median expenditure for users of formal mental health services in the second year of the study was \$280^{17/} although it should be noted that the elderly were excluded from this study.

In studies with benefit packages more comparable to the Demonstration, the Demonstration's cost per beneficiary is equivalent. In a study of utilization of psychiatric service by employees of one large company with a liberal benefit

^{14/} Data are based on a 1984 private communication between Macro Systems, Inc., and staff of the HCFA/Statistical Information Services Branch.

^{15/} McCall, N., S. Parker, and T. Rice. Op. Cit.

^{16/} Horgan, C. M. Op. Cit.

^{17/} Wells, K. B., et al. Op. Cit.

package, \$576 was paid in outpatient benefits per claimant in 1980.^{18/} For CHAMPUS in Fiscal Year 1980, the average amount paid per user beneficiary was \$538 for outpatient care^{19/}, or \$6.58 per CHAMPUS eligible.

One final point is worth noting on the use of Demonstration facilities by Medicare beneficiaries. During the Baseline Period, more than 4,000 beneficiaries used Demonstration facilities. For these individuals, Medicare only paid for 11 percent of the encounters with them during the Baseline Period. Thus, these individuals were served by Demonstration facilities during the Baseline Period on an uncompensated basis by Medicare, the cost being borne predominantly by grant-in-aid funds from Federal, State, and local sources for 39 of the 40 Demonstration facilities.

For the Demonstration facilities, there were \$286,357 in charges to Medicare during the Baseline Period principally for physician services, and \$8,909,078 during the Demonstration Period, of which 56 percent was for partial hospitalization. Charges per encounter increased by 4 percent (\$28 to \$29) from the Baseline to the Demonstration Period, whereas charges per hour of partial hospitalization decreased by 25 percent (\$8 to \$6). The cost per encounter varied by type of facility--\$44 for CMHCs, \$52 for AMHCs, and \$18 for PHPs, as did the cost per hour of partial hospitalization--\$12 for CMHCs and \$6 for PHPs. These costs were substantially less than those reported in a 1979 NIMH study.^{20/}

Below, we examine questions relating to the cost of specific waivers' provisions.

^{18/} Sharfstein, S. S., S. Muszinski, and E. Myers. Health Insurance and Psychiatric Care: Update and Appraisal, American Psychiatric Association, 1984.

^{19/} Krizay, J. Executive Summary of 19 Reports Describing Utilization of Inpatient and Outpatient Psychiatric Services, Vector Research, 1983.

^{20/} Morrison, L. J. Unit and Episode Costs of Mental Health Treatment, Macro Systems, Inc., 1979.

(1) How Much Did The Benefit Package Cost The Medicare Program?

The benefit package of the Demonstration was defined by the services covered and who provided them. In general, all services provided by all clinical staff in Demonstration facilities were included in the Demonstration's benefit package, except for services provided off-site by non-QMHPs and certain services excluded by Medicare Part B, e.g., transportation services and residential care. This was a sharp departure from Medicare Part B, which covers diagnostic and treatment services of a physician, diagnostic services of a psychologist, services incident to those of a physician (but varying tremendously depending on the Medicare contractor handling a given claim), and some portion of partial hospitalization such as group therapy (but varying tremendously depending on the Medicare contractor handling a given claim).

As we mentioned earlier, 56 percent of the Demonstration benefit dollars paid out were for partial hospitalization, a service reimbursed only partly by Medicare contractors. Another way of looking at this is that 21 percent of beneficiaries consumed about 60 percent of the Demonstration's benefit dollars, less than the 20/80 rule applied to general health care in which 20 percent of insureds account for 80 percent of the dollars paid out in benefits. Thus, we can conclude that more than one-half of the benefit cost of the Demonstration was attributable to a service not usually covered by Medicare.

As we also mentioned earlier, there was a shift in the provider of care from the Baseline to the Demonstration Period. The shift was to QMHPs, personnel generally more expensive than other clinical personnel in the Demonstration facilities. Thus, we can conclude that some portion of the cost of the benefit is due to this shift, but the magnitude of the cost is unknown other than the fact that QMHPs represented 73 percent of the costs of ambulatory service encounters. In addition, QMHP psychologists, psychiatric social workers, and psychiatric nurses represented 43 percent of the costs of ambulatory service encounters--professionals whose services may or may not be covered under Medicare Part B.

Therefore, we can conclude that up to 90 percent of the cost of the Demonstration--56 percent of the cost of the Demonstration for partial hospitalization being paid for as a separate service, and the majority of the remaining percent being for the services of non-physicians--may have been attributable to the unique benefit package of the Demonstration.

(2) How Much Did The Change In The Annual Limitation On Reimbursements For Mental Health Treatment Cost The Medicare Program?

At the time the Demonstration was implemented, the following limitation was in place for reimbursement for psychiatric services under Medicare Part B^{21/}:

2470. Psychiatric Services Limitation--Expenses Incurred For Physician's Services

Regardless of the actual expenses for physician's services incurred in connection with the diagnosis and treatment of mental, psychoneurotic or personality disorders of persons who are not inpatients of hospitals, the amount of such expenses that can be counted in a calendar year is limited to the lesser of \$312.50 or 62.5 percent of the actual expenses. The computation of psychiatric expenses for deductible purposes is also subject to the 62.5 percent rule. Since \$312.50 represents 62.5 percent of \$500, any amount of noninpatient psychiatric service expense in excess of \$500 would not be considered in computing incurred expenses subject to reimbursement. Since the program's share of covered incurred expenses (after the \$60 deductible) is 80 percent of the charges, the maximum possible payment for services would be 80 percent of \$312.50, or \$250. This maximum could be reached only if the individual has had \$60 of incurred expenses other than noninpatient psychiatric service expenses. Where the beneficiary does not have any incurred expenses other than the noninpatient psychiatric service expenses, the maximum possible payment by the program would be \$202.

In addition, it is clear that the limitation is to apply only to physician services^{22/}:

^{21/} Medicare Carriers Manual, Part 3 Claims Process, 2470, HIM 14-3 (7-66).

^{22/} Ibid.

The limitation applies only to expenses incurred for physicians' services rendered in connection with one of these psychiatric conditions (with no distinction being made between the services of psychiatrists and nonpsychiatric physicians), and any items or supplies furnished by the physician in his own office. Services furnished by other personnel including home health services and outpatient hospital services would not be subject to the special psychiatric limitation even though the services are in connection with a condition included in the definition of "mental, psychoneurotic, and personality disorders."

The Demonstration changed the limitation to \$750 per beneficiary per calendar year, applied to all services for one-half of the CMHCs and AMHCs. CMHCs and AMHCs were assigned to the limitation group at random. In addition, there was no limitation on partial hospitalization services.

Given the experimental manipulation of the annual limitation on reimbursements, it was possible to examine the effects of it separately. The \$750 limit facilities had substantially higher per beneficiary annual charges than the no limit facilities in the Baseline Period (\$548 to \$182) but not in the Demonstration Period (\$534 to \$585). This was partially an artifact of the assignment to the experimental condition because those facilities with a limit tended to be those facilities which billed Medicare during the Baseline Period. Nevertheless, the limit condition was statistically significant (p less than .005), with the limit condition facilities having higher annual charges per beneficiary than the no limit facilities during the Demonstration Period.

Overall, 56 percent of the beneficiaries in the limit facilities met the limit for the one full calendar year of the Demonstration. The proportion was higher for the disabled (under 65) beneficiary population than for the elderly (over 65) beneficiary population. In contrast, during 1981, of the 354,000 beneficiaries who submitted bills for psychiatric services under Part B, 74,000 or 21 percent had incurred charges of \$250 or more.^{23/}

^{23/} Birkmaier, J. Op. Cit.

Overall, some 55 percent of all beneficiaries (without regard to the limit) had annual charges less than \$250.00.

4. DID THE DEMONSTRATION OFFSET THE COST TO MEDICARE FOR THE USE OF MENTAL HEALTH BENEFITS?

Data available at this time could only partially address questions as to whether or not the Demonstration offset the use of other Medicare benefits. Preliminary analysis of the offset issue focused on the types of Medicare beneficiaries using Demonstration benefits, changes in the types and amounts of outpatient mental health benefits used, and the effects of the Demonstration on the use of Medicare inpatient mental health benefits. A separate addendum to this report is planned to be issued, addressing the questions of offsets more completely.

It is clear that the demonstration reached a new, previously untreated Medicare population. For these individuals, there could not have been compensatory savings to the Medicare program for the provision of mental health services to this population, or shifts away from traditional providers of mental health care. This was also reflected in the MEDPAR analysis which showed no discernible impacts of the demonstration on the use of Medicare Part A benefits for inpatient treatment of a psychiatric disorder. Yet, the MEDPAR analysis did show markedly lower use of Medicare inpatient mental health benefits in the demonstration areas between the pre-waiver and post-waiver periods. This finding is consistent with NIMH research showing reduced use of inpatient in geographic areas served by organized ambulatory mental health treatment settings, with the availability of partial hospitalization being the key explanatory variable.^{24/} It should be noted, however, that MEDPAR may not be an appropriate, definitive dataset to test the offset question because of its unknown representativeness, and the fact that it was exclusive to use of inpatient mental health services charged to the Medicare program. Subsequent analysis on claims data will examine the offset question more fully relative to the use of all health services charged to Medicare, the results of which will be issued as an addendum to this report.

^{24/} Taube, C. and H. Goldman. Personal correspondence, 1985.

5. RECOMMENDATIONS

In terms of its original, stated purposes, the Demonstration was a success--accessibility to mental health care provided in organized settings by Medicare beneficiaries was increased. Accessibility was achieved through a substantial investment by Medicare, particularly for partial hospitalization. However, these overall costs are not out of line with similar benefit packages offered by other payers. There is no evidence that either beneficiaries or providers attempted to take undue advantage of, or abuse, the Demonstration conditions.

In considering the Demonstration results, it is recommended that the Department focus attention on four key areas:

- . Provider Status--The national survey component of the evaluation of the Demonstration showed that 35 percent of the respondents to the survey were billing Medicare, at the time of the survey, using their own facility Medicare provider number. Many who were not reported difficulty in obtaining a provider number from the cognizant Medicare contractor, reflecting some difficulty in obtaining necessary approvals for the facility as a physician-directed clinic. In some parts of the country, it appeared easier to obtain such approvals than in other parts of the country. Additional work is needed to determine the nature of the problems being encountered. If, in fact, the problems are solely related to carrier implementation differences, this can be addressed with no change in policy or benefits.
- . Adequacy of the Current Benefit--It is noteworthy that the majority of beneficiaries in the Demonstration would have been unaffected by the current benefit--their charges were less than the current limitation. However, the younger, disabled beneficiaries incurred substantially higher charges, as did 47 percent of the elderly beneficiaries. It is recommended that consideration be given to raising the current limit and changing the current co-payment level to assure accessibility for these populations.

- . Application Of The Limitation--Current Medicare policy^{25/} is that the annual reimbursement limit only applies to physician services, not to services incident to those of a physician as long as the physician limit is not reached. However, we found substantial variation in how Medicare carriers were treating the limit--some apply it as specified in the policy, some apply it to all services including "incident to" services, and some pay for "incident to" services on an unlimited basis so long as the limit on physician services is not attained--the current policy. The Department can ensure that the current policy is implemented uniformly throughout the country, without a change in policy or benefits.
- . Coverage Of Partial Hospitalization--The partial hospitalization benefit proved to be expensive, when covered on an unlimited basis as a separate service. Consequently, if consideration of payment of partial hospitalization as a separate service as opposed to the current policy of paying for some components of partial hospitalization such as group therapy is undertaken, then use of limits (either dollars or days) will be an essential feature to control costs.

^{25/} Medicare Carriers Manual, Part 3 Claims Process, 2474, (9-84).

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